ORDER NO. VRD9505M114

Service Manual

Video Cassette Recorder

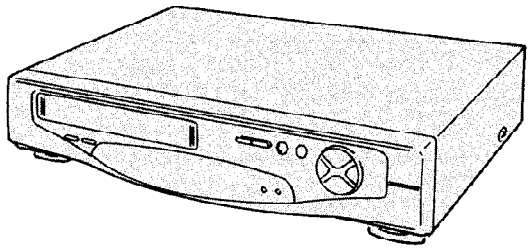
General Description
Adjustment Procedures
Block / Schematic Diagrams
Exploded Views / Parts List

Panasonic VHS PAL

Hi-Fi HQ

NV-HD600EG

K-MECHANISM



SPECIFICATIONS

ITEM	SPECIFICATION	ITEM	SPECIFICATION
POWER	SOURCE: 220~240 V AC 50/60 Hz	TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape FF/REW Time: 2.5 min. with 180 min. type tape
	CONSUMPTION: 21 watts		
RECORDING SYSTEM	2 rotary heads, helical scanning system		
	PAL		
TV TUNER SYSTEM	VHF I: CHN1~CHS10 VHF III: CHE5~CHS41 (PAL/SECAM B) UHF: CH21~CH69 (PAL/SECAM G) 75Ω terminated	DIMENSIONS	430(W)×91(H)×310(D) mm
		WEIGHT	4.7 kg
RF OUT SYSTEM	UHF: CH 36±6 (PAL/SECAM G) 70^{+2}_{-3}dBμ, 75Ω terminated	STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-res Remote Controller
VIDEO	HEADS: 4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L'-R' heads)		
	INPUT: EURO AV Connector (21 pin×2) 1.0 Vp-p, 75Ω unbalanced		
	OUTPUT: EURO AV Connector (21 pin×2) 1.0 Vp-p, 75Ω unbalanced		
AUDIO	HEAD: 1 Stationary head (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)		
	INPUT: EURO AV Connector (21 pin×2) More than −6 dBV (500 mV), 10 kΩ		
	OUTPUT: AUDIO OUT Connector (Phono type) −8 dBV (400 mV), Less than 1 kΩ EURO AV Connector (21 pin×2) −6 dBV (500 mV), Less than 1 kΩ		

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Panasonic

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⚠ **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.

Section 1 presents you with technical know how for actual servicing and general information of features and controls, enabling you to become familiar with each function.

Section 2 presents to your mechanical and electrical adjustment information as well disassembly and replacement procedures.

In the case of very common information relating to other models like mechanical adjustments, please refer to the appropriate service manual.

Section 3, 4 contains block diagrams which provides you with information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c. ...

Section 5 contains exploded views and parts list.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

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SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

1-1-1. CHANNEL MEMORY IC INITIALIZATION

When replacing the memory IC7704, its IC should be initialized.

Note:1) It should be performed before tuning.
2) Meaning of "INITIALIZATION" is to make dependency in different models and to distinguish between different features.

Method:
1) Connect a jumper wire (K2501) which has been cut as shown below.

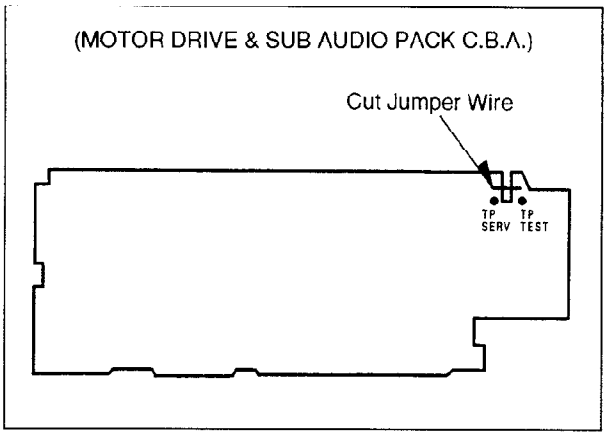


Fig. S1

2) Press the "FF", "REW" and "EJECT" buttons to set the Service Mode. (Test Mode will be appeared on the monitor TV.)
3) Set the Model Code for this model by using 10-key on the Remote Controller Unit as follows.
4) After finishing the initialization, cut the K2501 and cancel the Service Mode.

		NV-HD600EG
Code No.	IR	129
	OSD	128

Note:1) Set to IR No. when there is OSD button on the Remote Controller.
2) Set to OSD No. when there is not OSD button on the Remote Controller.

1-1-2. SERVICE POSITION

A. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.

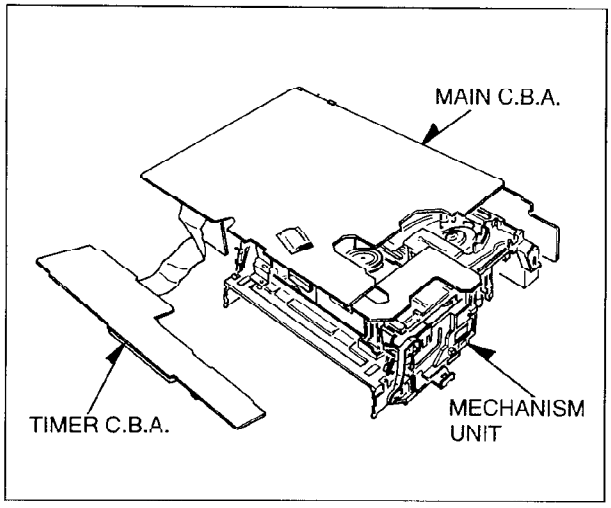


Fig. S2

B. MECHANISM SERVICE POSITION

When servicing the K-Mechanism, take out the mechanism from the MAIN C.B.A. and connect Extention Cable (VFK0889) between the loading-motor connector and P2001 as shown below.
In this position, the following services are possible.

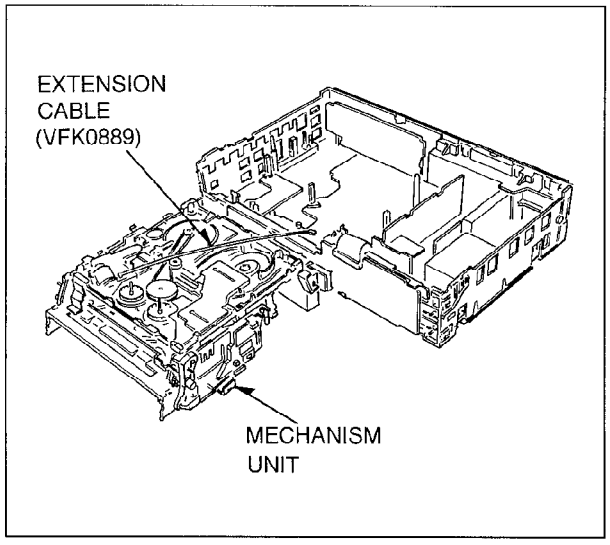


Fig. S3

B-1. CHECKING OF GEAR PHASE ALIGNMENT CONDITION

1) Check gear phase Alignment Condition of Mechanism.

B-2. CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for manual operation of loading/unloading operation as follows.

1. HAND OPERATION
   1) Turn the Worm Gear or the Worm Wheel Gear (Remove the Loading Motor Unit) manually.

2. BATTERY OPERATION
   1) Remove the Extention Cable (VFK0889).
   2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals.

3. SERVICE INFORMATION DISPLAY OPERATION
   1) Set the Service Information Display mode. (Press the "FF", "REW" and "EJECT" buttons simultaneously.)
   2) Press the "FF", "REW" and "EJECT" buttons 7 times to set the Service Mode 7. (The end of display on the Display becomes "--".)
   3) In the above Service Information Display mode, the Loading Motor rotates for Loading operation when the "PLAY" button is pressed.
      The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of mechanism movement.

B-3. CHECKING OF REEL GEARS OPERATION

1) Move the mechanism to "PLAY" position by loading operation. (Refer to B-2)
2) Turn the Capstan Rotor Unit to check movement of reel gears.

C. INPUT/OUTPUT PACK AND MOTOR DRIVE & SUB AUDIO PACK C.B.A.s SERVICE POSITION

Use the extension cables when checking.

PART NO.	PART NAME	PCS	CONNECTION
VFK0939	13-PIN WIRE CABLE	1	PP3901 (MAIN) – PS3901 (I/O)
VFK0678	18-PIN WIRE CABLE	1	PP3902 (MAIN) – PS3902 (I/O)
VFK0917	11-PIN WIRE CABLE	1	PP2001 (MAIN) – PS2501 (M. DRIVE)
VFK0918	17-PIN WIRE CABLE	1	PP2002 (MAIN) – PS4701 (M. DRIVE)

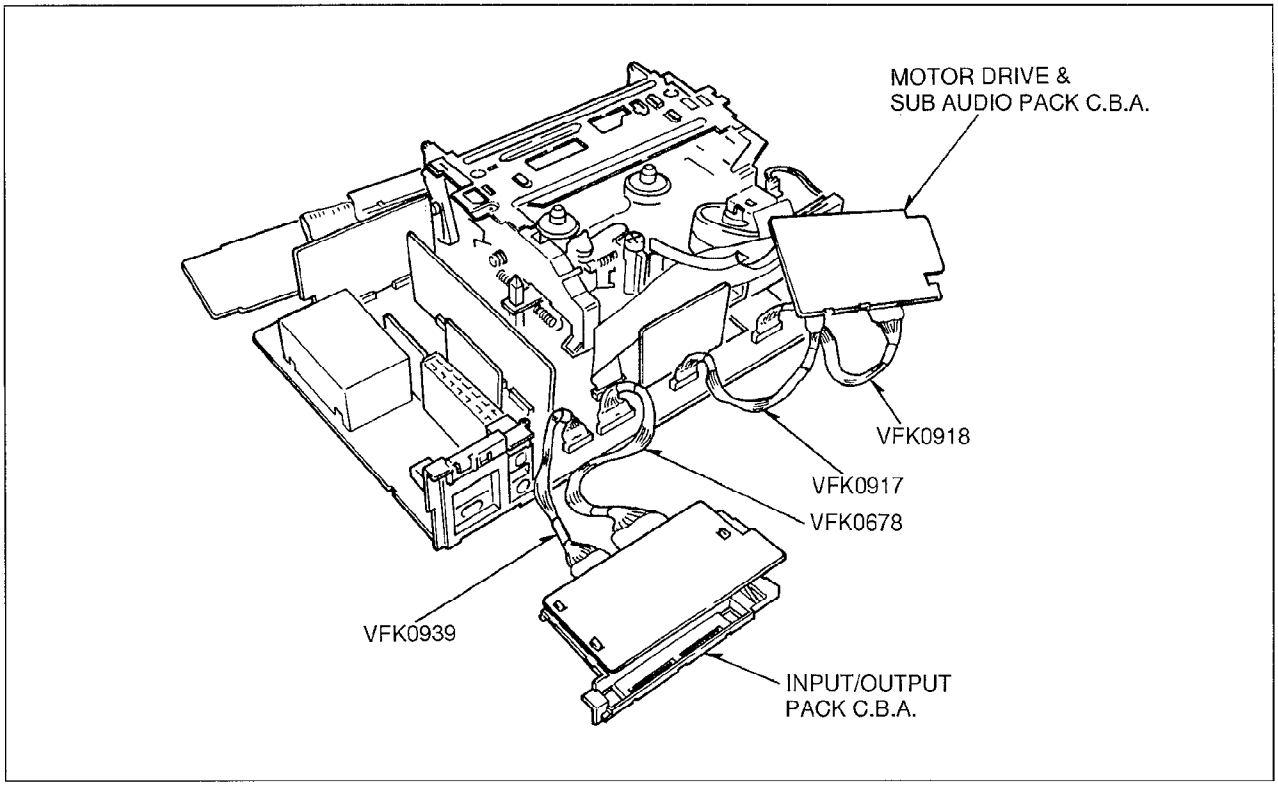


Fig. S4

D. UPPER CYLINDER REPLACEMENT

D-1. UPPER CYLINDER DISASSEMBLY

1) Remove the Top Panel.
2) Remove the Screw (A) and Cylinder Angle.
3) Remove the Screw (B) and Earth Plate.
4) Lift up the Upper Cylinder.

Note: Do not remove 3 Screws on the Upper Cylinder.

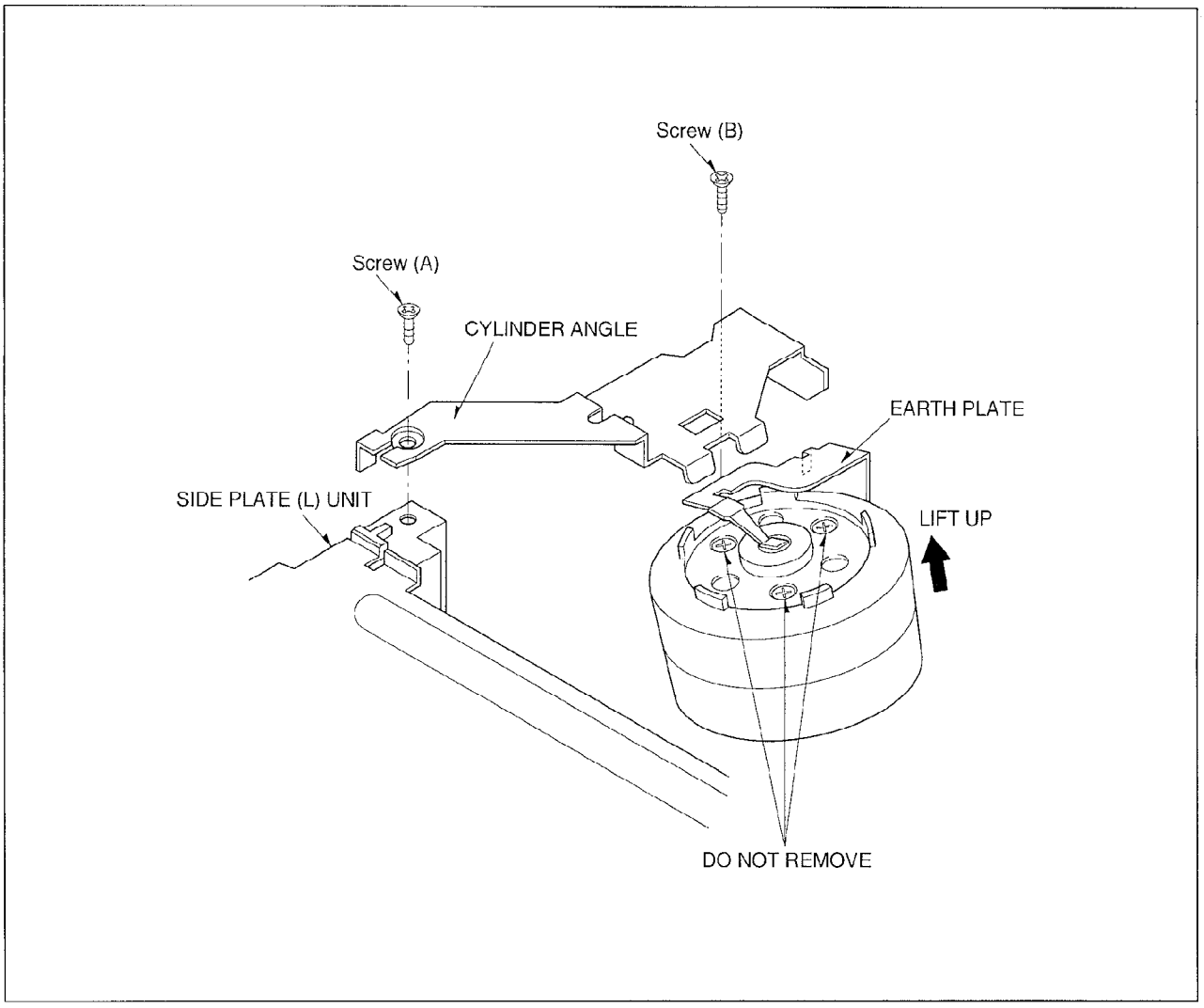


Fig. S5

Do not remove the Rotor Magnet which fixed by 3 screws on the Upper Cylinder.

If it is removed, refer to following method.

1) Install the Rotor Magnet so that the hole (C) on the Rotor Magnet fits to the small projection (D) on bottom of the Upper Cylinder.
2) Tighten 3 screws on top of the Upper Cylinder.

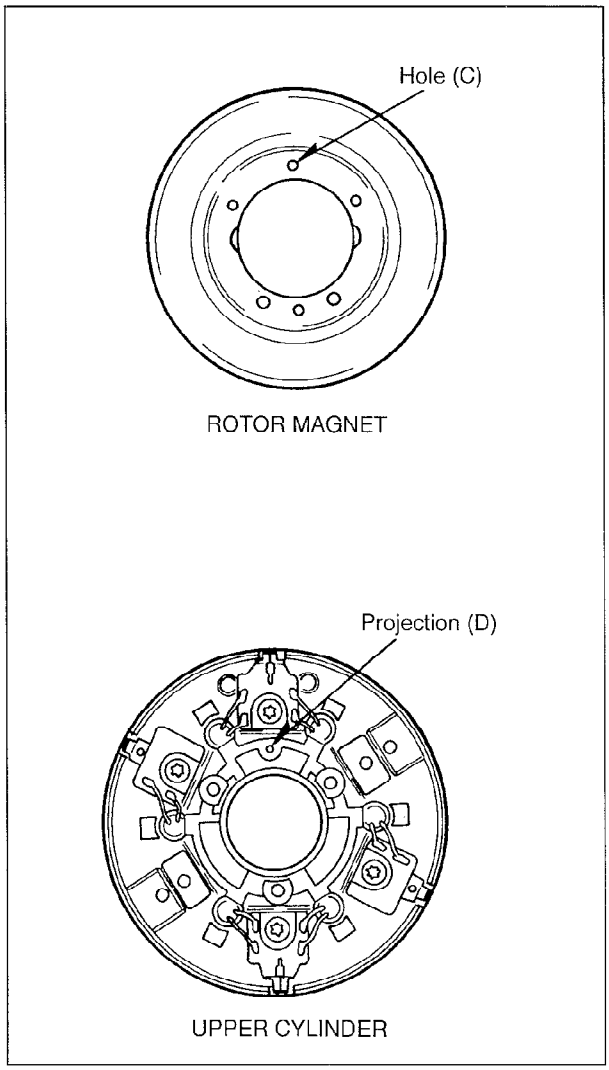


Fig. S6

D-2. UPPER CYLINDER ASSEMBLY

When reassembling, perform the steps in the reverse order of the DISASSEMBLY METHOD (Item D-1).

E. NEW GLDD CYLINDER UNIT REPLACEMENT

The Cylinder Unit can be replaced easily by the following method.

1) Remove the Top Panel.
2) Remove the 2 screws (RED) of Head Amp Mount.
3) Remove the Screw (A) and Cylinder Angle. (Fig. S5)
4) Remove the Screw (B) and Earth Plate. (Fig. S5)
5) Remove the 3 screws of the Cylinder Unit with a magnetized screw driver through the holes on the Bottom Plate as shown below.

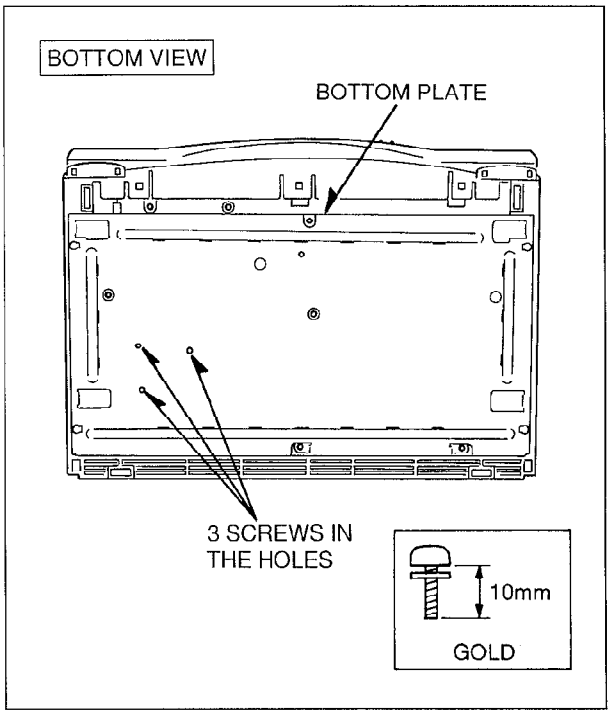


Fig. S7

F. CAPSTAN STATOR UNIT ASSEMBLY

When replacing the Cspstan Stator Unit, the Centre Fixing Tool (VFK0851) must be used to fix the centre of Capstan Stator Unit.

Method:

1) Place the Capstan Stator Unit into position.
2) Loosely tighten the 3 screws.
3) Insert the Centre Fixing Tool (VFK0851) as shown below.
4) Tighten the 3 screws.
5) Remove the Centre Fixing Tool.

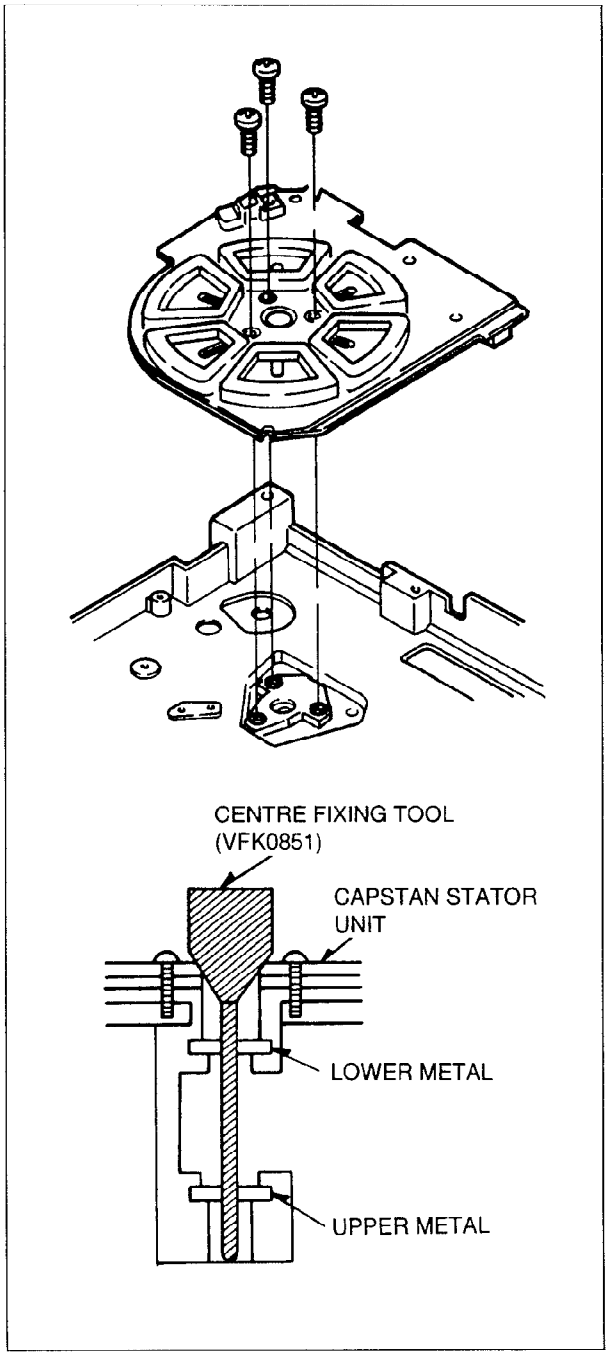


Fig. S8

G. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

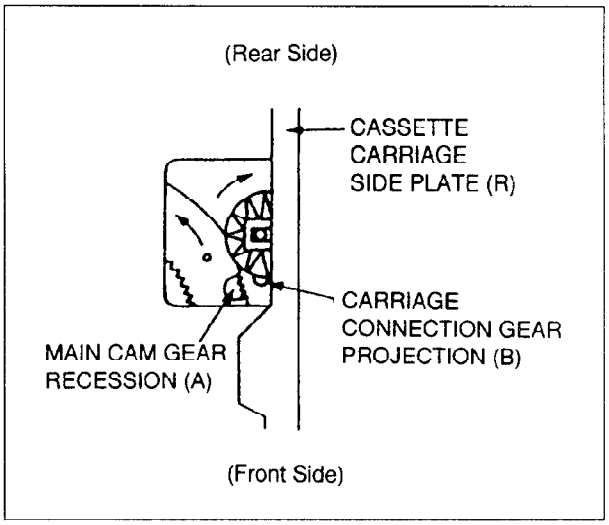


Fig. S9 Top View of Eject Operation

H. TAKE-UP PHOTO SENSOR OPERATION

Note the following matters for Take-up Photo Sensor Operation.

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take-up Photo Sensor. In this case, cover the Take-up Photo Sensor to prevent the light from falling on it.
2) While servicing of the K-Mechanism with "Power On" and without cassette tape inserted, the Unit does not operate properly.

1-1-3. REMOVAL OF THE CASSETTE TAPE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Take out the mechanism from MAIN C.B.A.
2) Turn the Worm Gear manually, moving the Loading Post to the unloaded position.
3) Turn the Capstan Rotor Unit clockwise to take up the tape.
4) Turn the Worm Gear again to eject the cassette.

2. BATTERY OPERATION

1) Take out the mechanism from Main C.B.A.
2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./ +4.5V) to the Loading Motor terminals as shown below.
3) After moving the Loading Post to the unloaded position, disconnect the battery to stop the motor.
4) Turn the Capstan Rotor Unit to clockwise to take up the tape.
5) Reconnect the battery to eject the cassette.

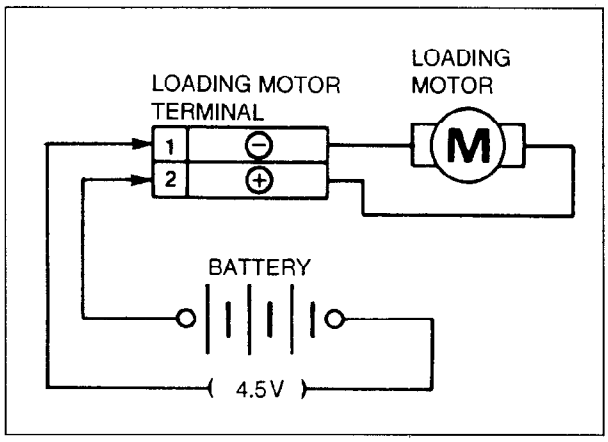


Fig. S10

If the cassette tape can not be removed by the above 2 methods, remove it by the following method.

1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the cassette tape from tape transportation (P1, P2, P3 and P5 Posts).
5) Turn the Capstan Rotor Unit to take up the tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the cassette tape from the Cassette Compartment.

1-1-4. FLAT CARD CABLE INSTLLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

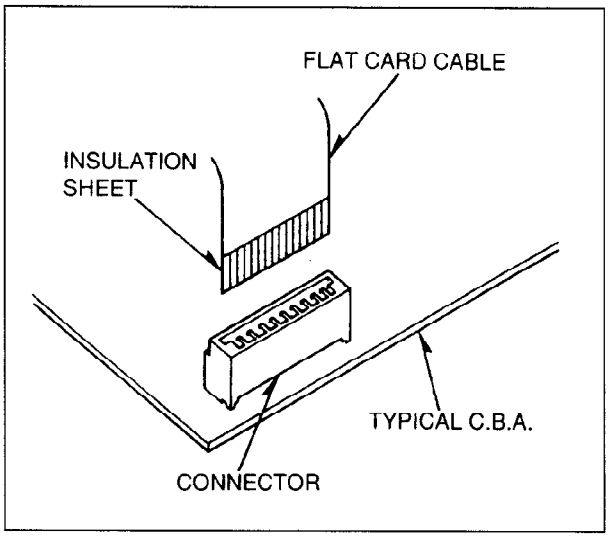


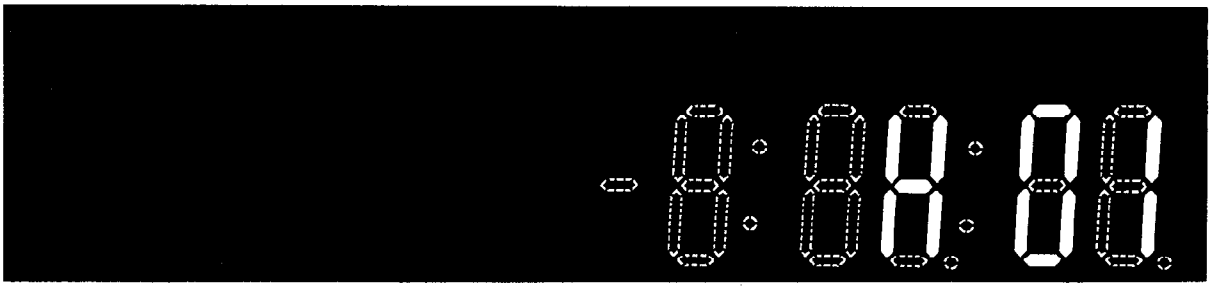
Fig. S11

1-2. SELF-TEST INDICATION DISPLAY

This VTR has a self-diagnosis and display function. If the VTR detects trouble during installation or during use, one of the following Fault Indication Codes will automatically appear in the VTR display. Fault Indication codes are displayed in the form of a single English letter followed by two numbers, as for example "H01".

Note:1. The indication "U" is displayed on the FIP while power remains on.
2. Otherwise, the indication "H" or "F" is displayed on the FIP, and the power is automatically turned off. When the power is turned on again, the Fault Indication Code will disappear and the unit will return to normal display mode (either clock or counter).
3. This Fault Indication Code will be stored in the Timer microprocessor even with the AC plug disconnected. The two-digit number portion of the stored Fault Indication Code can be redisplayed in the FIP's "second" display position (the last 2 digits on the light) by placing the unit is Service Mode Number 2 when turning on Service Information Display as for example "01" or "02" etc. If a second error occurs, only the most recent error will be displayed and stored.
4. To erase the stored Fault Indication Code data, press the FF, REW and EJECT buttons simultaneously for 5 seconds.

〈FIP〉



INDICATION	CAUSE	REMEDY/CHECK
U 10	Dew formation.	Wait until the indication disappears.
H 01	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder-motor drive circuit.
H 02	Cassette tape is not wound up during tape unloading except Eject mode.	Check the capstan-motor drive circuit.
F 03	Mechanism locks during mode transition except Eject mode.	1. Check the loading-motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the Mode Switch.
F 04	Mechanism locks during tape unloading.	1. Check the loading-motor drive circuit. 2. Check the mechanism phase alignment.
F 05	Cassette tape is not wound up during tape unloading in Eject mode.	1. Check the capstan-motor drive circuit. 2. Check the Supply/Take-up reel pulse.
F 06	Mechanism locks after tape unloading in Eject mode.	1. Check the loading-motor drive circuit. 2. Check the mechanism phase alignment for Cassette Holder Unit.
F 09	No serial clock transmission between IC6001 and IC7501.	Check the serial clock circuit.

Fig. T1 Self-Test Indication Display

1-3. SERVICE INFORMATION DISPLAY

〈FIP〉

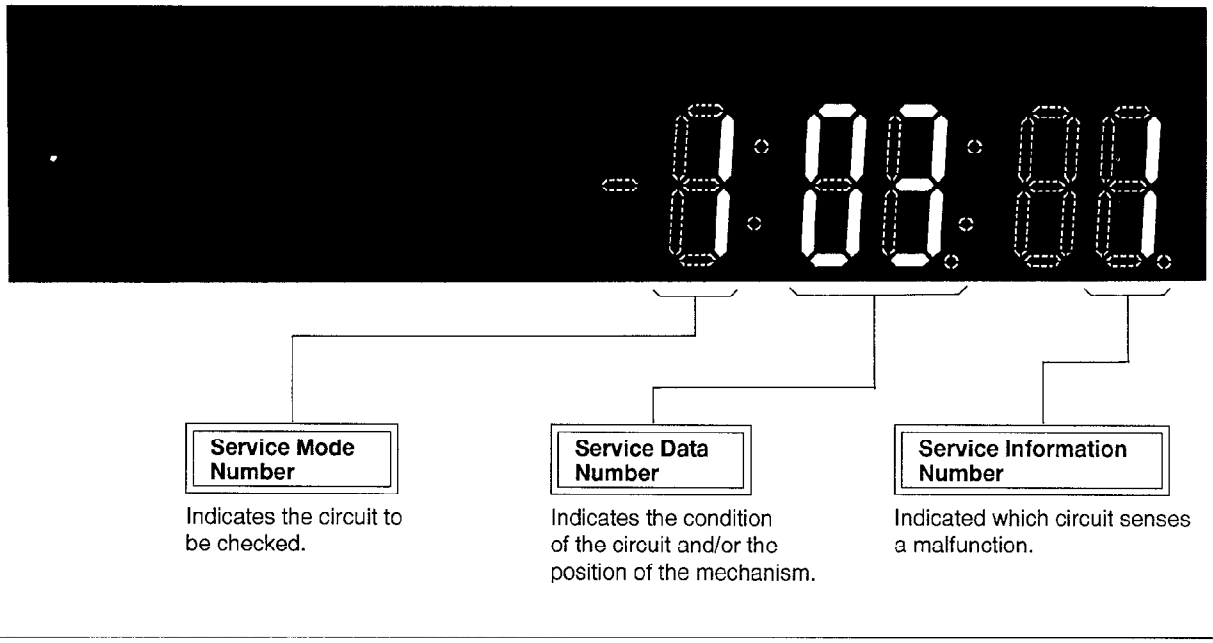

Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.
Service Information Number
Indicated which circuit senses a malfunction.

Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Press the "FF", "REW" and "EJECT" buttons simultaneously.
(2) Connecting a Jumper wire between TPSERV and TPTEST will display the service information indefinitely.

In the Service Information Display, there are four digits divided into 3 functions.
The first digit indicates which of the 8 service modes that the unit is currently in.

MODE 1 : Checks tape protection circuit
MODE 2 : Checks tape transport mechanism
MODE 3 : Checks mode switching operation
MODE 4 : Checks control buttons
MODE 5 : Checks capstan motor
MODE 6 : Checks cylinder motor
MODE 7 : Checks loading/unloading operation
MODE 8 : Not used.
(The MODE 8 is displayed only when connecting a jumper wire between TPSERV and TPTEST.)

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service Information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied. (except service mode number 2, 7 and 8)

1-3-3. Use of Service Modes

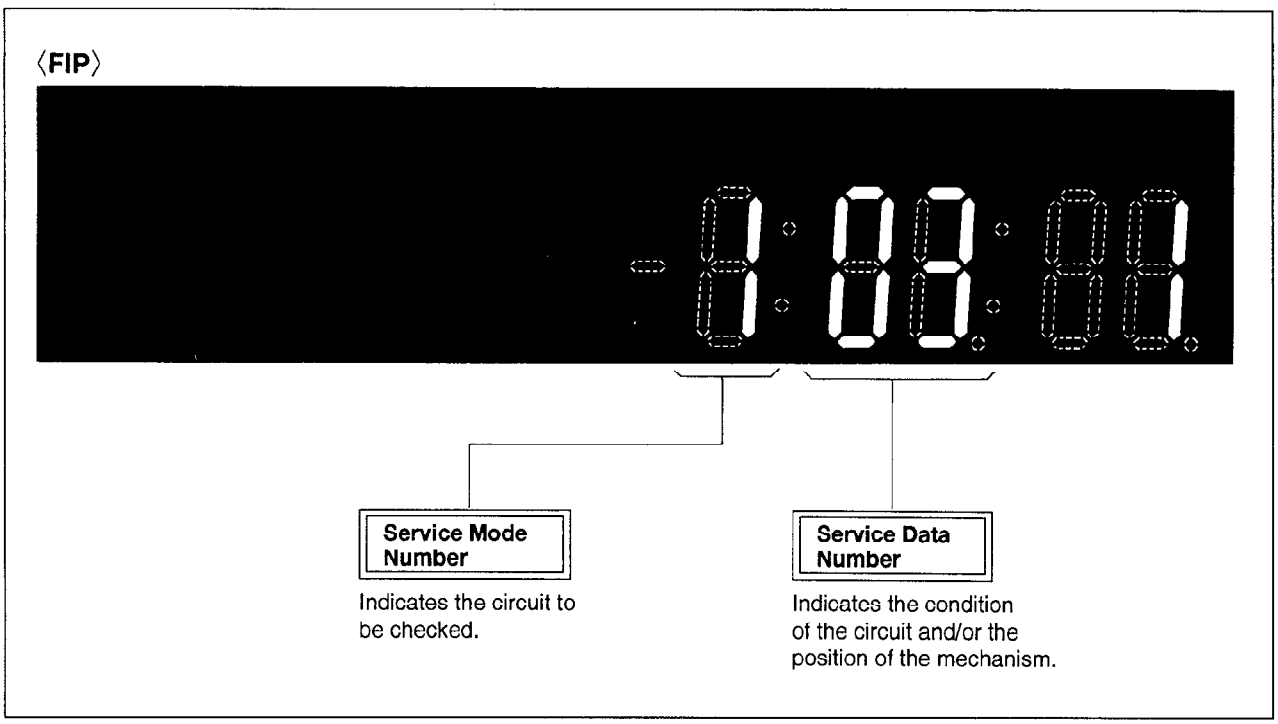

⟨FIP⟩
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicates the condition of the circuit and/or the position of the mechanism.

Fig. D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.
(2) To change Service Modes press the "FF", "REW" and "EJECT" buttons simultaneously.
(3) Mode 1 : Checks that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors.
When the light is blocked to both sensors, "00" should be indicated on the service data number.
When the light is blocked to the supply sensor, "01" should be indicated.
(4) Mode 2 : Checks the mode switch circuit while indicating mechanism position.
Service Data Numbers indicate the position of the mode switch and there by the mechanism position.
(5) Mode 3 : Checks that mode switch circuit operations have been completed.
Service Data Number should indicate "00" after each mechanism operation is completed.
(6) Mode 4 : Checks the operation circuit.
Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.
(7) Mode 5 : Checks the capstan motor circuit.
Indicates if the IC6001 has received the command to rotate the capstan motor.
(8) Mode 6 : Checks the cylinder motor circuit.
IC6001 has received the command to rotate the cylinder motor.
(9) Mode 7 : Checks the Loading/Unloading Operation.
The Loading Motor rotates for loading operation when the "PLAY" button is pressed.
The Loading Motor rotates for unloading operation when the "STOP" button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.
(10) Mode 8 : Not used.

<NOTE>
Refer to Fig. D5 for details of Service Data Numbers.

1-3-4. Service Information Number

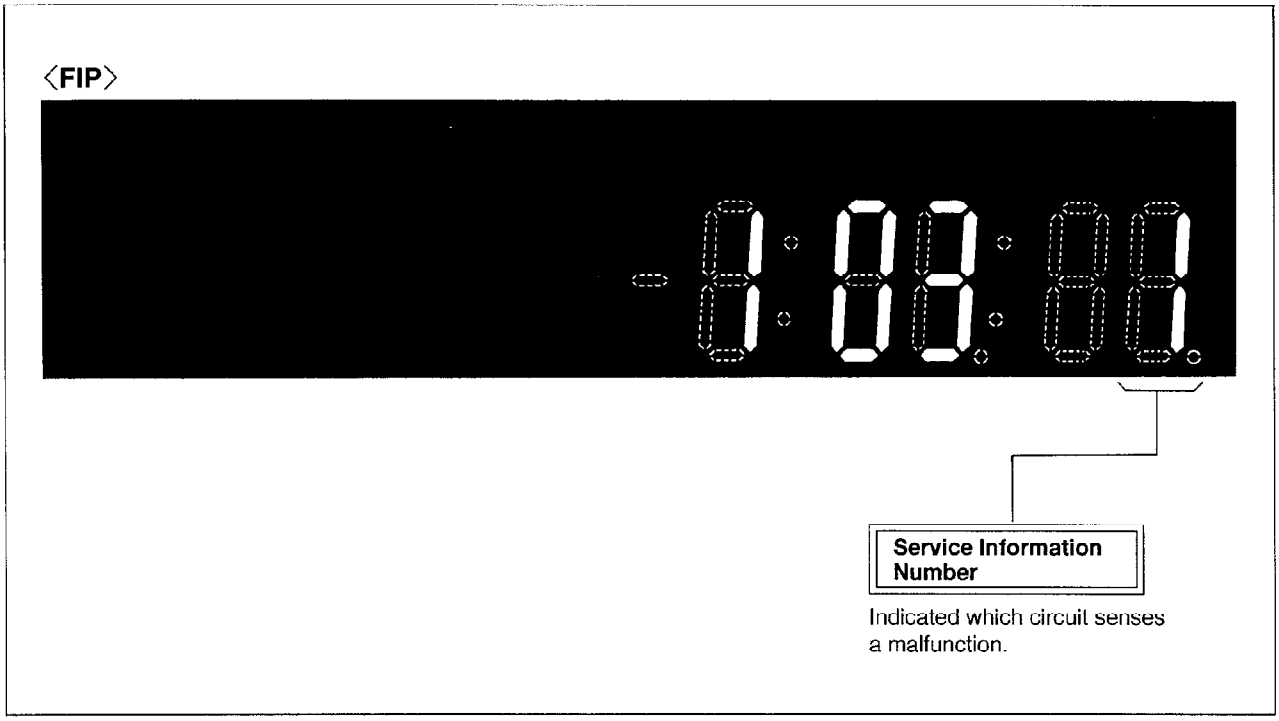


Fig. D3 Service Information Number on S.I.D.

Refer to Fig. D4 for details of Service Information Number.

Note:
The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is supplied.
If a second error occurs, only the most recent error will be displayed.
(except service mode number 2, 7 and 8)

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-In/Eject operation

Fig. D4 Detail Service Information Numbers

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	———	00	No light detected at either sensor.	Tape not required.
		01	Tape Beginning. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	———	00	EJECT	Tape Required. *1: STOP3; The Pinch Roller is on the capstan motor shaft. *2: STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig. D7 to Check mechanism Position and timing.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 *1	
		05	STOP *2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6		Tape not required.
5	Left digit only, disregard Right digit display.	8 1 (Left Digit, Right Digit)	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC5001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	8 7 (Left Digit, Right Digit)	1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor "CUE, FF, Forward Slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	8 (Left Digit, Right Digit)	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "Reverse, Rew, Reverse Slow" commands received by IC6001.	
6	Left digit only, disregard Right digit display.	1 0 (Left Digit, Right Digit)	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

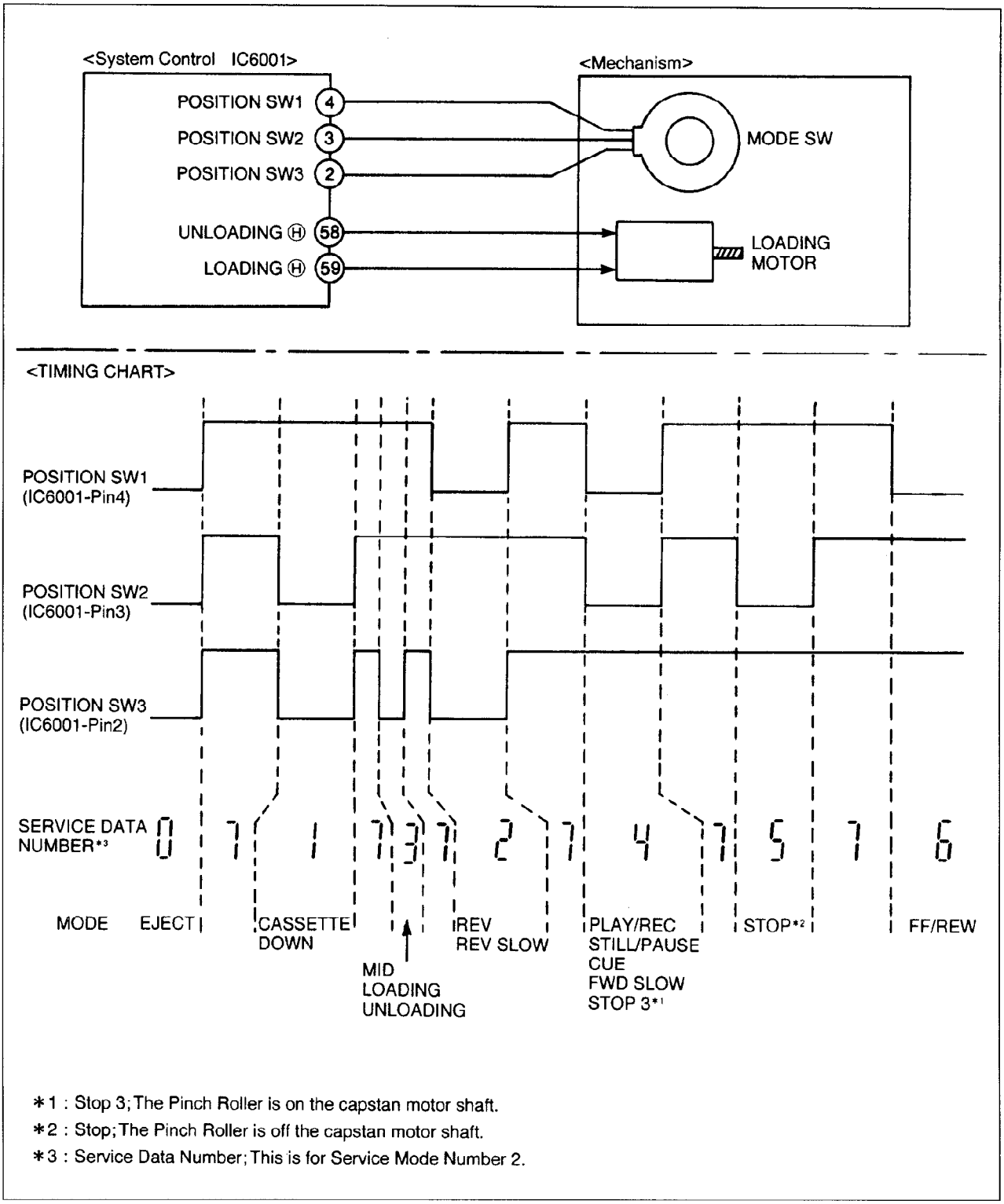
Fig. D5 Service Data Display and Indication

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	06	PAUSE/STILL
01	EJECT	54	RESET
-0	INPUT SELECT	5	ZERO STOP
—	SP/LP	49,4U	INDEX
34,35	∧ ∨, + −	A1,A2	TRACKING (+, −)/V-LOCK
—	CANCEL	0	SLOW
—	MENU	57	OSD
A4	TIMER REC	00	STOP
08	REC	03,02	FF, REW
33	AUDIO OUT	55	DISPLAY
—	SHOW VIEW/G-CODE/VIDEO PLUS	0U	PLAY

Fig. D6 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position through the Mode SW.
Fig. D7 shows the timing for Service Mode Number 2.



*1 : Stop 3; The Pinch Roller is on the capstan motor shaft.
*2 : Stop; The Pinch Roller is off the capstan motor shaft.
*3 : Service Data Number; This is for Service Mode Number 2.

Fig. D7 Timing Chart of Mode SW

1-3-6. Input/Output Chart for IC6001

<table>
<tr><th>Pin Number</th><th>Input/Output</th><th>Port Name</th><th>Function</th></tr>
<tr><td>1</td><td>I</td><td>SAFETY TAB</td><td>When inserting the cassette tape with safety tab, this port is low.
When there is no safety tab, this port is high to prevent recording.</td></tr>
<tr><td>2</td><td>I</td><td>POSITION SW 3</td><td rowspan="4">
<table>
<tr><th>P. SW 3</th><th>P. SW 2</th><th>P. SW 1</th><th>Position (Mode) Name</th></tr>
<tr><td>O</td><td>O</td><td>O</td><td>EJECT</td></tr>
<tr><td>O</td><td>O</td><td>I</td><td>CASSETTE DOWN</td></tr>
<tr><td>O</td><td>I</td><td>O</td><td>REV, REV SLOW</td></tr>
<tr><td>O</td><td>I</td><td>I</td><td>MID (LOADING/UNLOADING)</td></tr>
<tr><td>I</td><td>O</td><td>O</td><td>PLAY/REC, STILL/PAUSE, CUE, FWD SLOW STOP3 *1</td></tr>
<tr><td>I</td><td>O</td><td>I</td><td>STOP</td></tr>
<tr><td>I</td><td>I</td><td>O</td><td>FF/REW</td></tr>
<tr><td>I</td><td>I</td><td>I</td><td>INTERMEDIATE</td></tr>
</table>
(*1) The Pinch Roller is on the capstan motor shaft.
</td></tr>
<tr><td>3</td><td>I</td><td>POSITION SW 2</td></tr>
<tr><td>4</td><td>I</td><td>POSITION SW 1</td></tr>
<tr><td>5</td><td>I</td><td>SUPPLY REEL PULSE</td><td>Supply Reel Pulse Input
(For detecting tape remaining)</td></tr>
<tr><td>6</td><td>I</td><td>NORMAL / SERVICE/TEST</td><td>Service Mode Setting
Normal Mode : High
Service Mode : Middle
Test Mode : Low</td></tr>
<tr><td>7</td><td>I</td><td>DEW</td><td>Not used (Low setting)</td></tr>
<tr><td>8</td><td>I</td><td>TEST</td><td>Not used (Low setting)</td></tr>
<tr><td>9</td><td>I</td><td>ENVELOPE SELECT</td><td>The playback envelope video signal level is detected at this input to select the video head in the special playback modes.</td></tr>
<tr><td>10</td><td>O</td><td>ROTARY SW</td><td>This signal is supplied to the chrominance circuit to perform the phase rotation.</td></tr>
<tr><td>12</td><td>O</td><td>HEAD AMP SWITCH</td><td>This signal is supplied to the head amp circuit to switch the video head, SP or LP.</td></tr>
<tr><td>14</td><td>O</td><td>ARTIFICIAL V/H/N</td><td>Artificial Vertical Sync Signal is supplied to video circuit to stabilize the picture in the special playback modes.</td></tr>
<tr><td>17</td><td>I</td><td>TAKE-UP PHOTO</td><td>Take-up Side Photo Sensor Input
(For detecting tape beginning)</td></tr>
<tr><td>18</td><td>I</td><td>SUPPLY PHOTO</td><td>Supply Side Photo Sensor Input (For detecting tape end.)</td></tr>
<tr><td>19</td><td>I</td><td>TAKE-UP REEL</td><td>Take-up Reel Pulse Input
(For detecting tape remaining and reel (Cap.) lock.</td></tr>
<tr><td>20</td><td>O</td><td>SP/LP</td><td>Not used</td></tr>
<tr><td>45</td><td>O</td><td>AUDIO H. SW</td><td>This signal is supplied to the head amp circuit to switch the audio head, R or L.</td></tr>
<tr><td>46</td><td>O</td><td>SERIAL CLOCK SELECT</td><td>Refer to Fig. MP4 and MP5.</td></tr>
<tr><td>47</td><td>I</td><td>SYSTEM SEL</td><td>Refer to Fig. MP5.</td></tr>
<tr><td>48</td><td>I</td><td>L CH/R CH</td><td>Refer to Fig. MP4.</td></tr>
<tr><td>49</td><td>I</td><td>BIL/STEREO</td><td>Refer to Fig. MP4.</td></tr>
<tr><td>50</td><td>O</td><td>MESECAM (H)</td><td>Refer to Fig. MP6.</td></tr>
<tr><td>51</td><td>I</td><td>NTSC/PAL</td><td>Refer to Fig. MP4.</td></tr>
</table>

Fig. MP1

Pin Number	Input/Output	Port Name	Function
52	I	TV/VTR	Refer to Fig. MP4.
53	I	MONO 1/2	Refer to Fig. MP4.
54	O	SENSOR LED ON (L)	When turning on the Sensor LED, this port is low. 1) STOP Mode: No lit. 2) FF, REW, CUE, REV Modes: DC is lit. 3) EJECT Mode: Pulse blinking. (Cycle: 320 [msec])
55	O	VOLTAGE CHANGE (H)	When increasing the drive torque of loading motor to perform the FF/REW mode, this port is low.
56	O	DBS (L)	Refer to Fig. MP6.
57	O	SECAM (H)	Refer to Fig. MP6.
58	O	UNLOADING (H)	When unloading, this port is high.
59	O	LOADING (H)	When loading, this port is high.
60	O	HEAD SW	This signal is supplied to the head amp circuit to switch the video head, R or L.
61	O	CURRENT LIMIT	Capstan torque limitter output
62	O	CAP R/S/F	Capstan Rotation Direction Output Reverse : High Stop : Middle Foward : Low
63	O	SERIAL CLOCK	Serial Clock Output
64	I/O	SERIAL DATA	Serial Data In/Out
65	O	SP (H)	Tape Speed Output SP : High LP : Low
66	O	DELAYED REC (H)	When the video goes to the recording mode after a delay from the video recording command, this port is high.
67	O	DELAYED AUDIO REC (H)	When the audio goes to the recording mode after a delay from the audio recording command, this port is high.
68	O	PAL I (H)	When selecting the PAL-I system during tuner preset.
69	O	REC (H)	When the video goes to the recording mode, this port is high.
70	O	NTSC (L)	Not used
71	O	AUDIO MUTE (H)	When the audio goes to the mute mode, this is high.
72	O	CAPSTAN REVERSE (H)	Not used
73	O	VTR (L)	VTR/TV switch output
74	O	A. DUB (H)	Not used
75	O	CURRENT EMPHASIS (H)	When the servo goes to the edit mode, this is high.
76	O	FF/REW (L)	When the servo goes to the FF/REW mode, this is low.
77	O	FM MUTE (H)	When the FM audio goes to the mute mode, this is high.

Fig. MP2

Pin Number	Input/Output	Port Name	Function
78	O	VIDEO EE (L)	When the video goes to the EE mode, this is low.
79	O	TRICK (L)	When the video goes to the special playback (CUE, REV, SLOW, STILL) mode, this is low.
80	O	POWER OFF (H)	Power ON/OFF Control is low when the power switch is turned on.
82	I	OSC 1	Oscillator input
83	O	OSC 2	Oscillator output
84	I	RESET (L)	When reseting the IC6001, this port is low.

Fig. MP3

		PIN 46 OUTPUT (SCAN OUT)	
		L	H
PIN 48 INPUT (RCH/LCH)	L	R CH	L CH
	H	—	—
PIN 49 INPUT (STER/BIL)	L	STEREO	BILINGUAL
	H	—	—
PIN 51 INPUT (SYSTEM/ DECK TYPE)	L	PAL SYSTEM	TV/VTR COMBINATION TYPE
	H	NTSC SYSTEM	TABLE TYPE
PIN 52 INPUT (TV/VTR)	L	COMPULSION TV	
	H	AUTO	
PIN 53 INPUT (MONO1/2)	L	MONO 2	MONO 1
	H	—	—

Fig. MP4

	PIN 46 OUTPUT	MODE
	L H	
PIN 47 (SYSTEM SEL)	L L	MODE 1
	L H	MODE 2
	H L	MODE 3
	H H	MODE 4

Fig. MP5

	MODE 1, 4	MODE 2	MODE 3
PIN 50 (SYSTEM 1)	MESECAM Ⓗ OUT	MESECAM Ⓗ OUT	NTSC Ⓛ OUT
PIN 57 (SYSTEM 2)	NTSC-M Ⓗ OUT	SECAM Ⓗ OUT	—
PIN 56 (SYSTEM 3)	DBS Ⓛ OUT	DBS Ⓛ OUT	—
PIN 68 (SYSTEM 4)	PAL-I Ⓗ OUT	SECAM Ⓛ OUT	—

Fig. MP6

1-3-7. CVC (CRISTAL VIEW CONTROL) FUNCTION

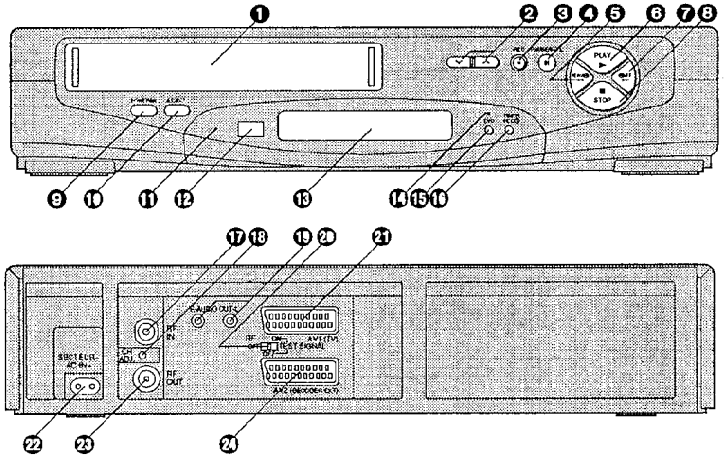
The playback are adjusted to achieve optimum picture quality from tapes with varying charactristics.

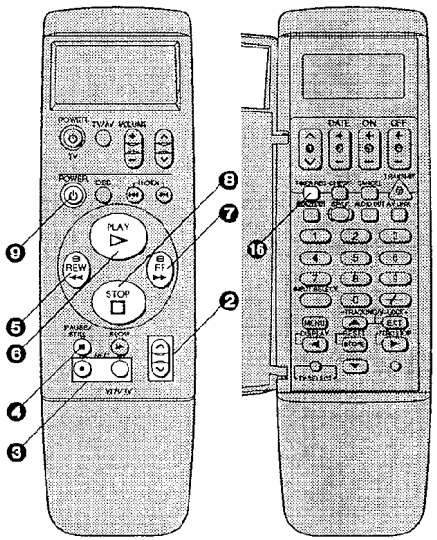
(1) Detail explanation
<Playback mode>
The picture quality is varying from the different tapes as follows:

1) If the output level is low, from worn or rental cassette tapes, a soft picture is obtained by the RF equlizer and picture control on the Lumi./Chro. Pack C.B.A.
2) If the output level is medium, from normal tapes, a sharp picture is obtained from the emphasis and picture control on the Lumi./Chro. Pack C.B.A.
3) If the output level is high, from HG/S tapes, a sharp and detailed picture is obtained from the RF equlizer, emphasis picture control and noise canceller on the Lumi./Chro. Pack C.B.A.

Controls and Connection Sockets

This gives a detailed explanation of the function of each button, switch and connection socket.





❶ Cassette Compartment
Insert a video cassette here.

❷ ∨ ∧
To select the required programme position (TV station).

❸ REC
To start a recording.
- Press both buttons simultaneously for the remote controller.

❹ PAUSE/STILL
During playback: Still picture.
During recording: To interrupt recording.

❺ REW (REWIND)
In the stop mode: To rewind the tape.
In the playback mode: To search backward.
In the rewind mode: To obtain high speed picture.
"◁◁" is lit.

❻ PLAY
To start playback. "▷" is lit.
For the repeat playback function.

❼ FF (FAST FORWARD)
In the stop mode: To fast forward the tape.
In the playback mode: To search forward.
In the fast forward mode: To obtain high speed picture.
"▷▷" is lit.

❽ STOP
To stop any playback or recording.

❾ POWER ⏻/I
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❿ EJECT
To eject a video cassette.

⓫ Standby Indicator
This indicator is lit when the VTR is turned off or the VTR is in the timer recording standby mode.

⓬ Infra-red Remote Control Receiver Window

⓭ Display

⓮ CVC Indicator
When CVC is set to on, this indicator is lit.

⓯ CVC (Crystal View Control)
ON: Using the CVC function, playback is performed in the state which achieves optimum picture quality in light of characteristics of a tape.
- The CVC indicator is lit
- This control should normally be left in the ON position.

OFF: Turn off the CVC function.
- The CVC indicator is not lit.
- With certain tapes, the OFF position may result in a better picture.

⓰ TIMER REC
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

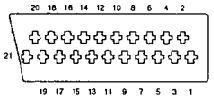
⓱ RF IN
To connect to the external aerial.

⓲ CH ADJ.
To adjust the RF transmitting channel 30–42.

⓳ AUDIO OUT
To connect the sound to a stereo audio system.

⓴ RF OFF/TEST SIGNAL
RF OFF: Set to this position when the VTR is connected to the TV via the 21-pin scart cable.
TEST SIGNAL OFF:
Set to this position when the VTR is connected to the TV via the RF coaxial cable only.
TEST SIGNAL ON:
Set to this position when tuning the TV into the VTR.
The test signal is transmitted on channel 36 initially.

㉑ AV1 (TV)
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV



1	AUDIO OUTPUT CH2 (R)	13	RED GROUND
2	AUDIO INPUT CH2 (R)	14	BLANKING GROUND
3	AUDIO OUTPUT CH1 (L)		
4	AUDIO GROUND	15	RED
5	BLUE GROUND	16	BLANKING
6	AUDIO INPUT CH1 (L)	17	VIDEO OUTPUT GROUND
7	BLUE		
8	SWITCHING VOLTAGE	18	VIDEO INPUT GROUND
9	GREEN GROUND		
10	No connection	19	VIDEO OUTPUT
11	GREEN	20	VIDEO INPUT
12	No connection	21	GROUND

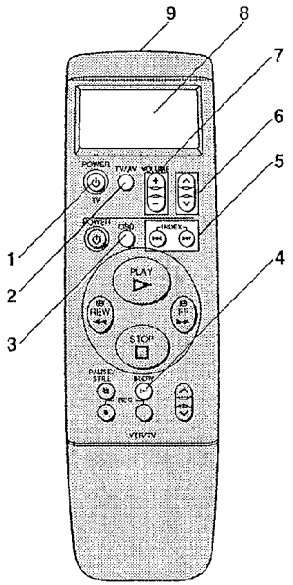
Caution: RGB reservation for only E/E operation when connecting the Pay TV decoder

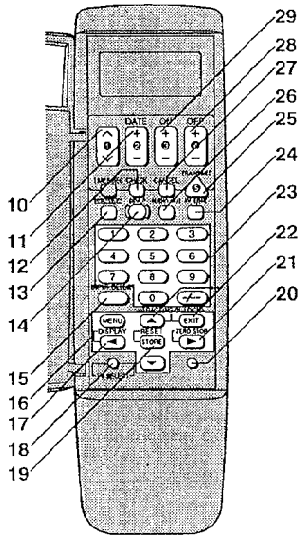
㉒ AC IN~
To connect to the main power supply.

㉓ RF OUT
To connect to the aerial terminal on a TV set.

㉔ AV2 (DECODER/EXT)
To connect to a decoder or another VTR.
- Only used as the input socket.

Infra-red Remote Controller





1 POWER (TV)
To switch the TV from on to standby mode or vice versa. In standby mode, the TV is still connected to the mains.
- With some TV models, it may only be possible to switch the TV to standby mode using this button. In this case, use TV/AV or ∨ ∧ (TV) to switch the TV on.

2 TV/AV
To select the TV input.

3 OSD
For the On Screen Display Function.

4 SLOW
For the slow motion playback function. "⊟" is lit.

5 INDEX
For the index search function.

6 ∨ ∧ (TV)
To select the required programme position (TV station) of the TV.

7 VOLUME
To adjust the volume of the TV.

8 Display

9 Infra-red Transmitter
The programming data are transmitted from here to the VTR.

10 ∨ ∧
To programme a timer recording.

11 DATE
To programme a timer recording.

12 CHECK
To check timer programmes.

13 SHOWVIEW
For the ShowView programming.

14 SP/LP
To select the tape speed desired for recording.
SP gives the best picture quality.
LP gives the longest recording time.

15 INPUT SELECT
To select the A1 or A2 external recording source.

16 OSD Operation Buttons
MENU: To make On Screen Display **Main Menu** appear on the TV screen.
▲ ▼ ◀ ▶/STORE:
To make selections from On Screen Display.
EXIT: To make On Screen Display disappear on the TV screen.

17 DISPLAY
To change the indication on the VTR Display or On Screen Display.

→Clock→Counter→Remaining Tape Time→

18 TV SELECT
To set the remote controller for operation of the TV.

19 RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

20 No function.

21 ZERO STOP
For the zero stop function.

22 TRACKING/V-LOCK
For manual tracking adjustment
The + and − buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For slow tracking adjustment
When noise bars appear during Still or Slow playback, switch over to slow playback and adjust with the + or − Button to reduce the noise bars.

For vertical locking adjustment
Use the + and − buttons to minimize any vertical jitter during still-picture playback.

23 Number Buttons
- To select the programme positions (1–99).

9: 9

19: -/-- → 1 → 9

- To programme a ShowView number.

24 AV LINK
To select the VTR mode or TV mode for AV LINK.

25 TRANSMIT
To transmit the data that has been set on the remote controller to the VTR.

26 AUDIO OUT
To select the desired sound mode.
At the every push of this button, the audio output mode changes as follows.

→Stereo→Left→Right→Normal audio track→

The Left (L) and Right (R) Indicators on screen display shown which sound mode is selected in the following way.

Stereo: Both the L and R Indicators appear.
Left: The L Indicator appears.
Right: The R Indicator appears.
Normal: Both the L and R Indicators don't appear.

27 CANCEL
To cancel the settings made for a timer recording.

28 OFF
To programme a timer recording.

29 ON
To programme a timer recording.

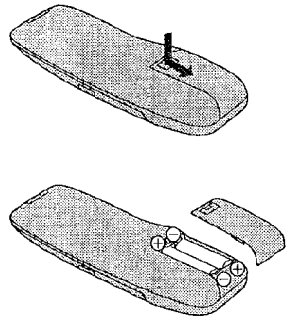
Power Source for the Remote Controller

The remote controller is powered by 2 "AA", "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

Precautions for Battery Replacement

- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

Installing the Batteries

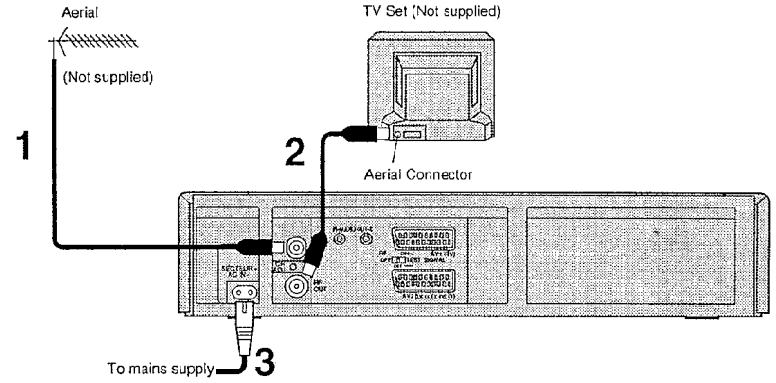


Connections

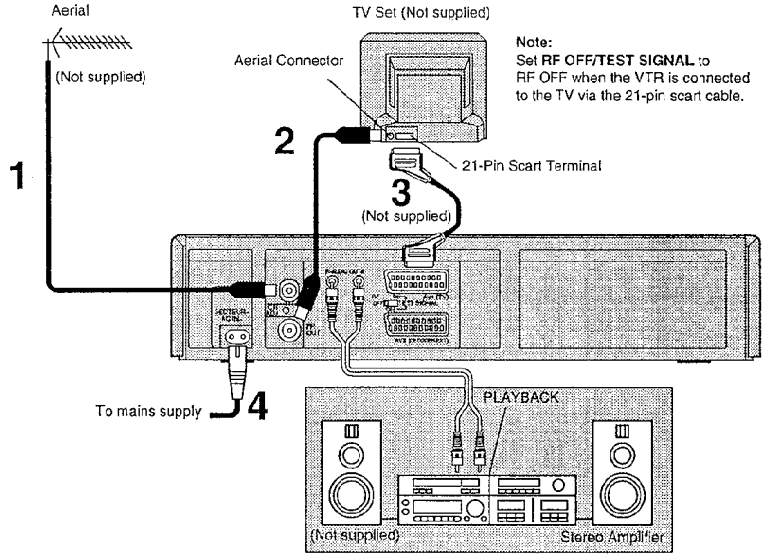
This tells you how to connect with an aerial, TV, etc.

Basic Connections

The following connections are required to record and play back the VTR through TV set:

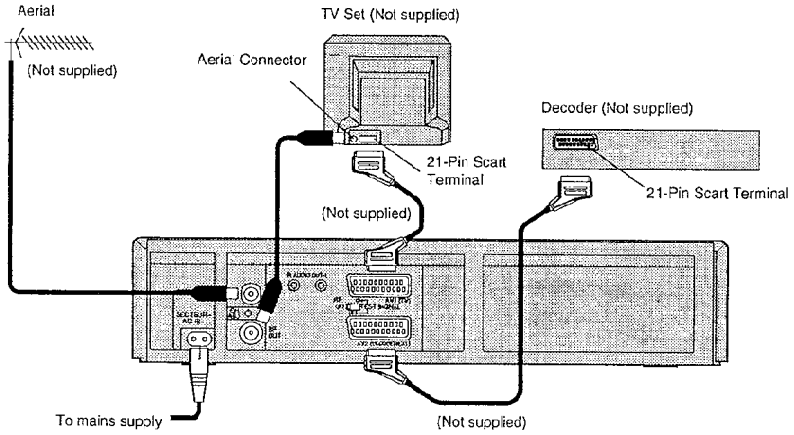


Connection to a TV Set with 21-Pin Scart Terminal



●Connection to a Stereo Amplifier

Connection to a Decoder



AV LINK

With this button the connected colour TV set can be switched from TV mode to VTR mode (vice versa) when it is connected by means of 21-pin scart cable.

This makes a variety of functions possible such as simultaneous recording and viewing when a Pay TV decoder or a satellite receiver has been connected.

VTR mode (VTR indicator lights):
To enjoy sound and pictures from the VTR.
- When **MENU** is pressed and the OSD (On Screen Display) screen is displayed, the unit also automatically switches to VTR mode.
  However, if the unit is originally in TV mode, the VTR indicator is not displayed.
- The unit also automatically switched to VTR mode when playback is started. However, the unit cannot be returned to TV mode during playback.

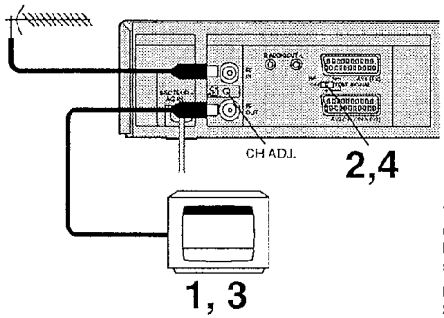
TV mode (VTR indicator goes off):
To watch another programme on the TV while recording on the VTR.
- Select the programme to be watched using the TV set's tuner.
- The sound and pictures of a different channel are received by the VTR.

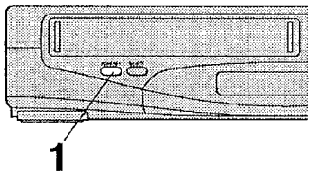
	VTR	TV set
Power On	VTR mode	AV input selected
	TV mode	Input from TV set's tuner*
Power Off	—	Input from TV set's tuner

*When the VTR is set to the TV mode and the Pay TV channel is selected, the signals will still be scrambled even when Pay TV is selected by the TV set's tuner. At a time like this, either set the VTR to the VTR mode or switch the TV set's input signals to AV input.

Note:
- If the TV set is provided with an RGB-compatible connector, connect the 21-pin AV cable from the VTR to this connector. Use full-pin 21-pin AV cables for connecting the TV set and VTR and for connecting the VTR and decoder.
- Set **RF OFF/TEST SIGNAL** to RF OFF when the VTR is connected to the TV via the 21-pin scart cable.

Tuning the TV to your VTR





The VTR supplies a signal to the TV set via the RF coaxial cable on channel 36.
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

If you have connected the VTR to the TV through the 21-pin scart terminal, then you do not need to follow the procedure mentioned below.

Operations

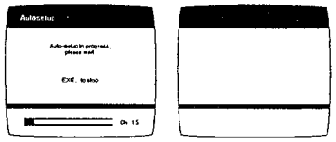
1 POWER

Turn on the TV and VTR.

2 RF ON / OFF / TEST SIGNAL / OFF

To generate a test pattern, set **RF OFF/ TEST SIGNAL** to TEST SIGNAL ON.

3 On Screen Display



(During Auto Setup) (After Auto Setup)

Set the TV to an unused position which you wish to use for your video playback.

4 RF ON / OFF / TEST SIGNAL / OFF

Set **RF OFF/TEST SIGNAL** to TEST SIGNAL OFF.

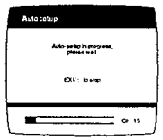
Note:
The test signal is transmitted on video channel 36. If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (30–42) by using the **CH ADJ.** screw which is located on the rear of the VTR.
Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item 2 to 4 above.

Auto Setup

Auto Setup

When the VTR is turned on after connecting the aerial lead and the mains lead, Auto setup (Auto tuning and Auto clock setting) starts.

On Screen Display



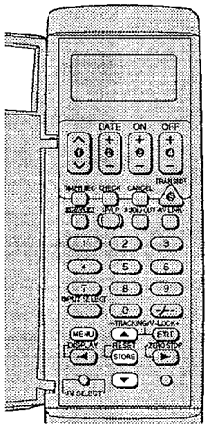
- The Auto setup is searching for TV station from VHF minimum to UHF maximum and memorizing the data for every programme position. The other programme positions are skipped.
- The Auto setup takes five or more minutes to complete the search for TV station and the clock setting.
- If the clock setting screen appears after auto setup has been completed, refer to page 25 and proceed with the setting.

Country-Selection

After the Auto setup is finished, select your country to set TV station list, guide number for ShowView and language.

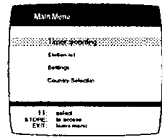
Preparations

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.



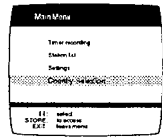
1 Press **MENU**.

MENU



2 Select **Country-Selection**.

▲ / ▼ → STORE



3 Select the desired country.
- Refer to page 28 as well.

▲ / ▼

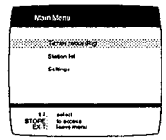
4 Press **STORE**, and then press **MENU**.

STORE → MENU

Viewing the TV station list

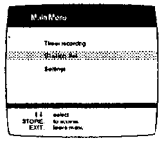
1 Press **MENU**.

MENU



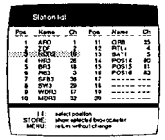
2 Select **Station list**.

▲ / ▼ → STORE



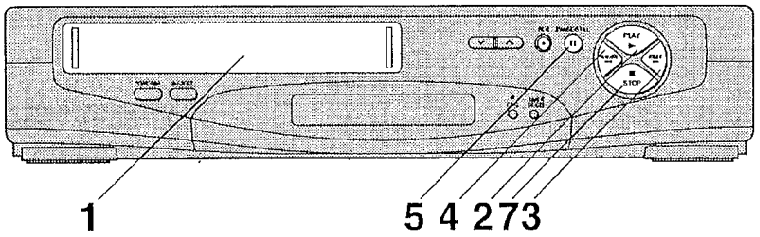
3 Select the desired TV station, if you want to view the broadcast.

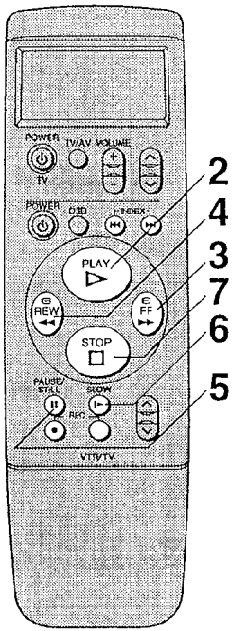
▲ / ▼ → STORE



Note:
If VTR is not correctly set by Auto setup, see **Various Settings** on pages 22–25.

Playback



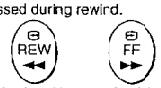


Operations	Display Symbols	
1		Insert a recorded cassette tape.
2 PLAY		Start viewing the picture.
3 FF		Search forward by tapping **FF**. •To change back to normal playback, press **PLAY**.
4 REW		Search backward by tapping **REW**. •To change back to normal playback, press **PLAY**.
5 PAUSE/STILL		View a still picture. •To continue the normal playback, press **PLAY** or **PAUSE/STILL**.
6 SLOW		View the slow motion picture. •To continue the normal playback, press **PLAY**.
7 STOP		Stop viewing the picture.

Other Playback Functions

To obtain High Speed Picture During Fast Forward or Rewind

Keep FF pressed during fast forward.
Keep REW pressed during rewind.



To playback the Recorded Part Repeatedly

Keep PLAY pressed for more than 5 seconds.

•Press STOP to release from Repeat Playback mode.

To return to a Specified Scene

1 Press RESET to set the counter to 0:00.00.

2 After playback, press **ZERO STOP** in the stop mode.
•The tape will be rewound or fast forwarded to 0:00.00 approximately.

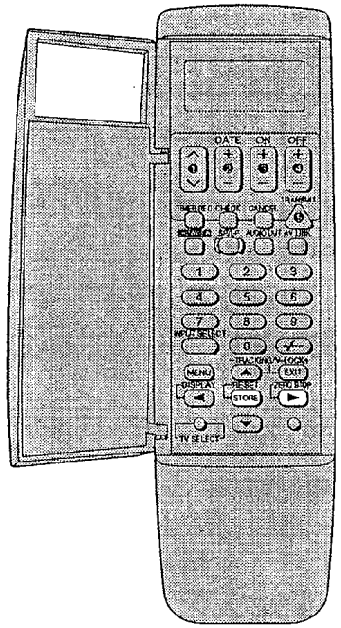
To find the Beginning of Each Recording

For example:
Searching for the 2nd recorded segment in the forward direction.

Press INDEX ▶▶I twice.

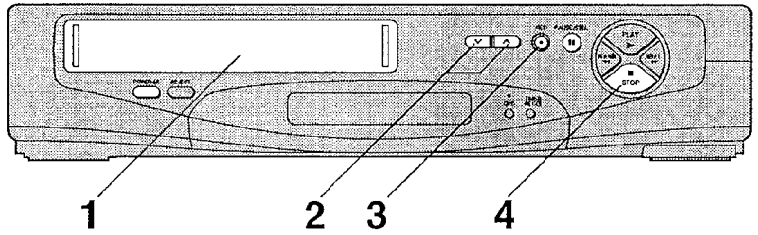
•After finding the specific recorded segment, playback starts automatically.
•For the reverse direction, press INDEX I◀◀.
•Up to 20 index signals can be searched for in both directions.
•When the opposite **INDEX** button is pressed, the number shall be decreased till 1.
•The figure on the display is decremented by 1 each time an index signal is located.

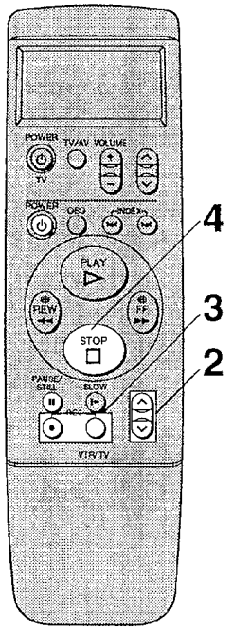
Recording Index Signals
Index signals are recorded in following cases.
•When a recording is started by pressing **REC**.
•When REC is pressed during recording.
•When timer recording is activated.



Notes:
•Audio reproduction of linear (conventionally recorded) tapes will be monaural when played back on the FM Hi-Fi video recorders.
•Cue, review or slow playback will be automatically released after 10 minutes, and still playback after 5 minutes.
•The INDEX search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.
•In LP mode only:
1. During any playback mode other than normal playback, the picture may have some noise bars, the colour may be unstable, or a black and white picture may appear.
2. When playing back a tape which was recorded on another VTR, it may be necessary to adjust the Tracking Control. In some cases the picture quality may still be inferior. This is due to limitation of format.

Manual Recording





Operations	Display Symbols	
1		Insert a cassette tape. ●If it has already been inserted, press **POWER** to turn the VTR on.
2		Select TV station.
3		Start recording.
4		Stop recording.

To select the Desired Tape Speed

Press **SP/LP** before recording.

To interrupt Recording

Press **PAUSE/STILL** during recording.
Press again to continue recording.

To record One TV Programme while Viewing Another Programme

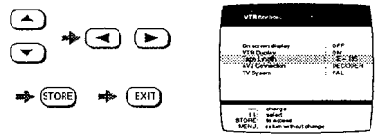
1 Refer to the manual recording operations steps **1** to **3**.

2 Select the TV programme on your TV set you wish to view at the present time.

To display the Approximate Remaining Tape Time

1 Select **Tape Length** from On Screen Display and select the corresponding cassette tape length. See page 27.

On Screen Display



◀ E-180: For E30, -60, -90, -120 and -180 tapes.
E-195: For E195 tape.
E-240: For E240 tape.
E-260 ▶: For E260 and -300 tapes.

2 Press **DISPLAY**.

→Clock→Counter→**Remaining Tape Time**

●The remaining tape time may not be displayed correctly depending on the tape used.

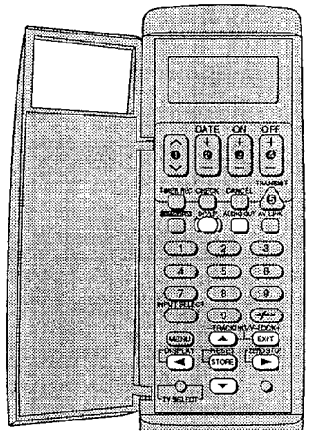
Recording of Stereo and Bilingual Programmes

1 Recordings are automatically made in the stereo or bilingual mode. This prevents errors in the selection of the dubbed or the original language.

2 During playback press **AUDIO OUT** to select the desired sound mode. See page 7.

Notes:

●When a video cassette with a broken off tab is inserted, the "GO" indication will flash to indicate that recording is not possible.
●The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.



The NICAM Broadcast System (NV-HD600EC only)

NV-HD600EC is equipped with the NICAM sound system also.
NICAM is a 2 Channel sound broadcast system to provide either a high quality stereo sound track or 2 independent MONO sound tracks, M1 and M2.
NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with **AUDIO OUT** during playback.

●The NICAM digital stereo sound can only be recorded on the Hi-Fi audio track.
●To record the regular sound (ordinary normal sound) on the FM audio tracks when a Stereo, Bilingual or NICAM programme is received, select **Mono ON** during manual tuning procedure. See page 22.

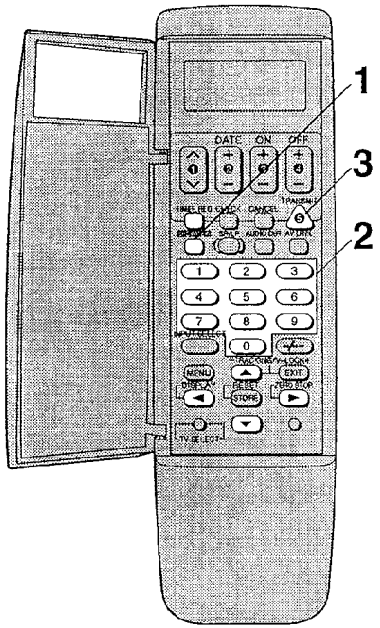
Important Note for the NICAM System

When NV-HD600EC is switched on, the tuner will automatically switch to a NICAM broadcast, if NICAM is being transmitted. During test transmissions, it is possible that the sound received doesn't correspond to the picture being viewed. In order to receive a synchronized sound and picture, select monaural sound with **AUDIO OUT** or **Mono ON** setting. This will only apply until NICAM transmissions are fully operational.
At this time the NICAM signal is transmitted on stereo channels only, since the M1 and M2 formats are not yet available. Even if the sound track is in MONO, the stereo indicator will appear.

Timer Recording

ShowView Programming

Programming is now easier than ever: simply enter the ShowView number provided in the programme schecule column carried by newspapers and magazines. ShowView numbers are numbers which are assigned to each programme listed in the TV programme schedule carried in newspapers and TV guides. When these numbers are entered and **TRANSMIT** is pressed, the numbers are converted into the actual programming and sent to the VTR.



Preparations

- Insert a cassette tape with an intact erasure prevention tab.
- Confirm that the TV is on and the VTR viewing channel is selected.

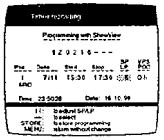
Operations **Display Symbols**

1 Press **SHOWVIEW**.

2 Enter a ShowView number.
Example: 920216

3 Press **TRANSMIT**.

On Screen Display



- The VTR will be in the timer recording standby mode after about 1 minute.
- If the "––" appears in the programme position:

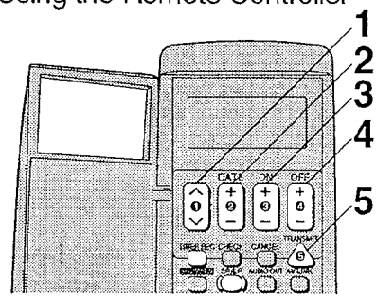
select the programme position of your VTR which receives the TV station you entered at step 2 using button ▲ or ▼.

- To extend the ending time or to make any corrections, use buttons ▲ ▼ ◄ ►.

Notes:

- To release from the standby mode, press **TIMER REC**.
- When the ShowView number is used for programming, the recording time may be slightly longer than the actual programme time.
- When programming two or more programmes, repeat steps **1–3**.
- The procedures for checking and cancelling a timer programme are the same as on page 19.

Using the Remote Controller



For Example:

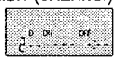
Programme position (channel);	2
Date:	27th, October
Starting time;	20:02
Ending time;	21:30

Preparation

- Insert a cassette tape with an intact erasure prevention tab.
- Open the door of the remote controller.

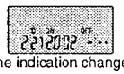
Operations **Display Symbols**

1 Set Programme position (channel) "2".



2 Set Date "27".

3 Set Starting time '20:02'.



- When it is kept pressed, the indication changes in 30-minute steps.

4 Set Ending time "21:30".

5 Press **TRANSMIT**.

On Screen Display

- The VTR will be in the timer recording standby mode after about 10 seconds.
- To release from the standby mode, press **TIMER REC**.

Weekly Timer Recording

In step 2, select the desired day by pressing **DATE** –.
For example, SU (Sunday)

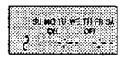
(SU=Sunday, MO=Monday, TU=Tuesday, WE=Wednesday, TH=Thursday, FR=Friday, SA=Saturday)

Daily Timer Recording

For this timer function, several groups of days can be selected.

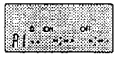
Ⓐ Daily recording from Monday to Friday
Ⓑ Daily recording from Monday to Saturday
Ⓒ Daily recording from Sunday to Saturday

In step 2, select the desired days by pressing **DATE** –.
For Example, Ⓒ



Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the AV1 (TV) or AV2 (DECODER/EXT) sockets, select the A1 or A2 indicator for the programme position.



Selecting the Desired Tape Speed

Press **SP/LP** in any of steps 2–4.

Checking and Cancelling a Timer Programme

The procedures for checking and cancelling a timer programme are the same as on page 19.

Using On Screen Display

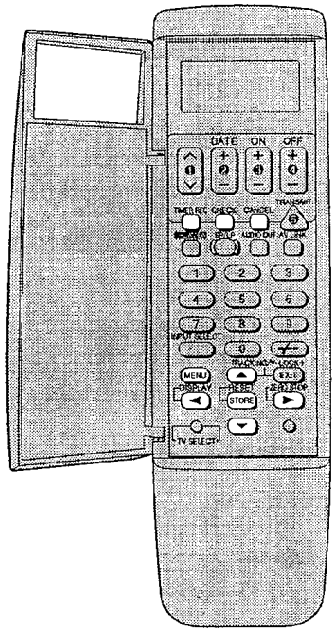
Up to 8 timer programmes can be recorded up to one month in advance by setting the timer, including weekly and daily programmes.

Preparations

- Insert a cassette tape with an intact erasure prevention tab.
- Confirm that the TV is on and the VTR viewing channel is selected.

For Example:

Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30
(Present date; 15th, October)	



Follow the operation guide on screen display.

Operations

1 Press **MENU**, and then select **Timer recording**.

2 Select the unoccupied position.

3 Set **Programme position** (channel) "2".
- Press ◀ to return to the previous item.

4 Set **Date** "27/10".

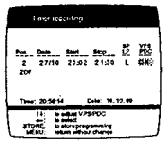
5 Set **Starting time** "20:02".
- When it is kept pressed, the indication changes in 30-minute steps.

6 Set **Ending time** "21:30".

7 Select the desired **Tape speed** (SP/LP).

8 Select **VPS/PDC ON** or **OFF** (–––).

On Screen Display



9 Press **STORE**.

10 To activate timer recording, press **TIMER REC**.

Weekly Timer Recording

In step 4, select the desired day by pressing ▼.

Daily Timer Recording

For this timer function, several groups of days can be selected.

Ⓐ Daily recording from Monday to Friday

Ⓑ Daily recording from Monday to Saturday

Ⓒ Daily recording from Sunday to Saturday

In step 4, select the desired days by pressing ▼.

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the AV1 (TV) or AV2 (DECODER/EXT) sockets, select the A1 or A2 indicator for the programme position.

Setting other Programmes in Succession

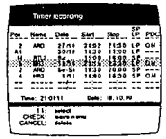
Repeat steps **2–9**.

Checking a Timer Programme

- The VTR must be turned on, or the timer recording indicator "⏲" is lit.
- Confirm that the TV is on and the VTR viewing channel is selected.

Press **CHECK**.
- On Screen Display may be distorted in the PDC/VPS recording standby mode.

On Screen Display



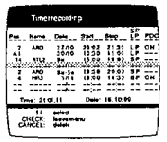
Cancelling a Timer Programme

- The VTR must be turned on, or the timer recording indicator "⏲" is lit.
- Confirm that the TV is on and the VTR viewing channel is selected.

1 Press **CHECK**.

2 Select the desired timer programme.

3 Press **CANCEL**.



Note:

If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later.

However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

PDC (Programme Delivery Control)/VPS (Video Programme System)

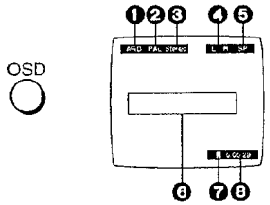
The Programme Delivery Control (PDC) or the Video Programme System (VPS) is a very convenient system which assures that the TV programmes you have programmed for timer recording will be recorded exactly from beginning to end, even if the actual broadcasting time differs from the scheduled time due to delayed start or extension of the programme duration. Also, if a programme is interrupted and, for example, some special news are inserted, the recording will also be interrupted automatically and resumed when the programme continues.

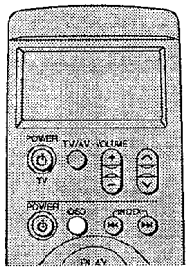
- In the case of PDC/VPS recording, use the **correct** time (PDC/VPS time) for recording the TV programmes. PDC/VPS recording is not performed when the time (PDC/VPS time) is incorrect, even if only by one minute.
- If the actual broadcasting times of timer recordings overlap (regardless of whether they are PDC/VPS controlled), the recording that starts first has always priority, and the recording of the later beginning programme will start only after the first timer recording has finished.
- When the PDC/VPS signal drops out because the broadcast signal is weak, or when a broadcasting station does not transmit a regular PDC/VPS signal, the timer recording will be performed in the normal mode (without PDC/VPS) even if it was programmed for PDC/VPS.
  In this case, even if the timer recording is performed, whatever has been programmed will not be cancelled at that particular time but at 4 a.m. on the following day.
- PDC/VPS recording is also possible during timer recording from AV2.

Other Functions

On Screen Display

Press **OSD** to make the On Screen Display appear on the TV screen.





❶ **TV station**

❷ **TV system**

❸ **Stereo or Bilingual Indicator**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.

❹ **Audio Output Mode Indicators**
The Left (L) and Right (R) Indicators show which sound mode is selected with **AUDIO OUT**.
Stereo: Both the L and R Indicators appear.
Left: The L Indicator appears.
Right: The R Indicator appears.
Normal: Both the L and R Indicators don't appear.

❺ **Tape speed indicator**

❻ **Error message**

❼ **Tape running display**

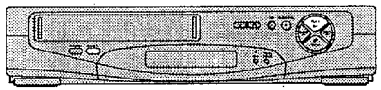
Stop, Eject	■
Rewind	◀◀
Fast Forward	▶▶
Playback	▶
Recording	●
Repeat Playback	R

❽ **Present time/Tape counter**

Information	Display
Present time	17:24:31
Tape counter	–2:35.47
Remaining tape time	REMAIN 2:34

Notes:
- On Screen Display may be disturbed or disappear during special playback.
- When the item **"On screen display"** is set to OFF, the On Screen Display will not appear. (See page 26.)

Other Automatic Functions



Automatic Playback
When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off Playback
When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

Automatic Rewinding
When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic Switching Off and Ejection
When the VTR is switched off, and inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

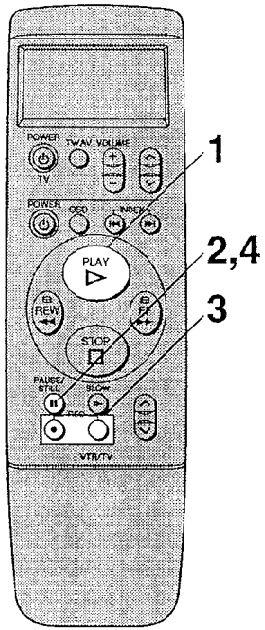
Editing

Assembly Editing

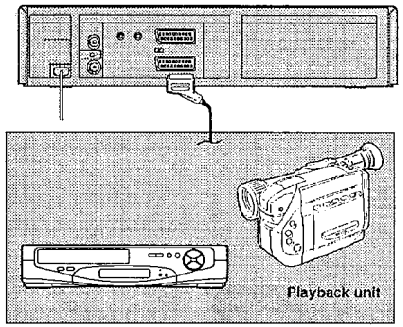
This function can be used to make up an edited tape from other recordings or video sources.

A new scene can be added to the end of a previous one.

Preparations
- Connect a movie camera or another VTR to this VTR as shown.
- Insert a recorded cassette tape with an intact erasure prevention tab.
- Select the video source required by pressing **INPUT SELECT** to set A1 or A2.
  A1: Through AV1 (TV) socket
  A2: Through AV2 (DECODER/EXT) socket



Recording VTR



Operations

1 Search for the end of the previous recording.

2 Press **PAUSE/STILL**.

3 Press **REC** to switch the VTR from the pause mode to the recording standby mode.

4 Start the new recording by pressing **PAUSE/STILL** again.

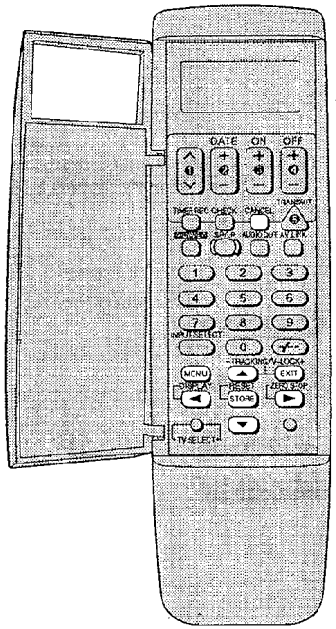
Storing TV Broadcasts into your VTR

Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.
If VTR is not correctly tuned by Auto setup, follow the procedure bellow.

Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and select the programme position except A1 and A2.



Manual Tuning Procedure

Follow the operation guide on screen display.

Operations

1 Press **MENU**.

2 Select **Settings**.

3 Select **Tuning**.

4 Select **Manual**.

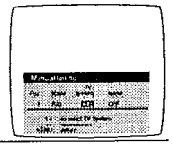
5 Select desired programme position.

6 Select Channel **(Ch)**.

On Screen Display

7 Select **Dec ON** or **Dec OFF**.
ON: To preset pay TV stations.
OFF: To preset normal TV stations.

8 Use ◄ ► to display the next screen.
Select **TV System**.
PAL: For receiving PAL signal.
MESECAM: For receiving SECAM signal.



9 NV-HD600EC only
Select **Mono OFF**.
- Select **Mono ON** to record the normal sound during a stereo, bilingual or NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.

10 Press **MENU**, and then press **EXIT**.

Channel Plan

Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2–12	*E2–E12	E2–E12
*3–20	A–H (Only Italy)	——
21–69	21–69	21–69
74–76	——	S1–S3
80–82	——	M1–M3
83–89	S4–S10	M4–M10
90–99	S11–S20	U1–U10
121–141 Hyperband	**S21–S41	S21–S41

*In Italy: H1...(11), H2...(12)
**Only for 8 MHz channel raster

To change the programme position or TV station name:

After step 5 but before step 8, select the programme position **(Pos)** or TV station name (Name) item using ◄ ►, and then make the desired change.

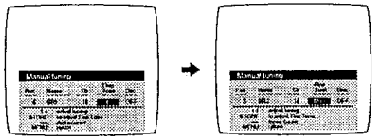
Fine Tuning Procedure

Follow steps 1 to 5 on page 22.

6 Select Fine Tune.

7 Press ▲ or ▼ to obtain the best tuning condition.
- To return the tuning to its former state, press **STORE**.

On Screen Display



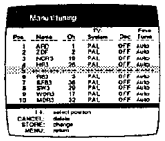
8 Press **MENU**, and then press **EXIT**.

Blanking of Unoccupied Programme positions

Follow steps 1 to 4 on page 22.

5 Select the desired TV station.

6 Press **CANCEL**.



- Repeat steps 5 and 6 for another unoccupied programme positions to skip during the selection of the programme positions.

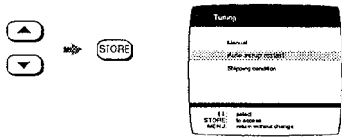
7 Press **EXIT**.

Auto Setup Restart

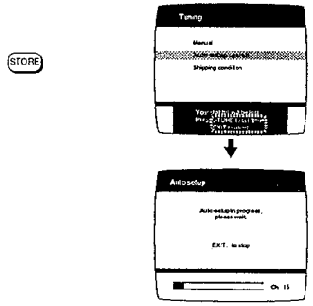
When your address changes, follow the procedure below.
Follow the steps **1** to **3** on page 22.

4 Select **Auto setup restart**.

On Screen Display



5 Press **STORE**.

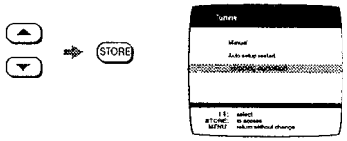


- After the Auto setup, select the your country to set TV station list, guide number for ShowView and language. See page 11.

Shipping Condition

If you want to return the VTR to the factory-preset condition, follow the procedure bellow.
Follow the steps **1** to **3** on page 22.

4 Select **Shipping condition**.



5 Press **STORE**.

6 Press **STORE** again.

Note:
To re-tune VTR, disconnec: mains lead and then reconnect mains lead. If VTR is off, turn on the VTR. Auto setup starts.

Setting the Clock of your VTR

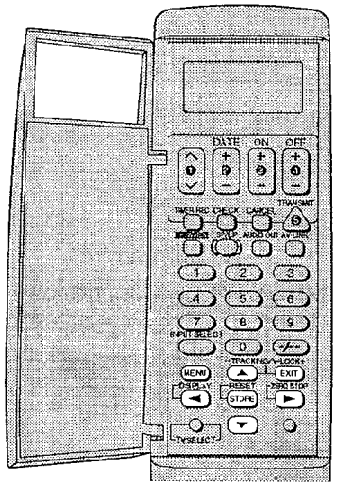
The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

If VTR is not correctly set by Auto setup, follow the procedure below.

Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.



Manual Clock Setting

Follow the operation guide on screen display.

Operations

1 Press **MENU**, and then select **Settings**.

2 Select **Clock**.

3 Select **Manual setting**.

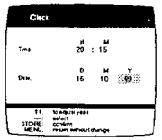
4 Set **Time (H/M)**.
- When it is kept pressed, the indication changes in 30-minute steps.
- Press ◄ to return to the previous item.

5 Set **Date (D)**.

6 Set **Month (M)**.

7 Set **Year (Y)**.
- There is no need to press ►.

On Screen Display



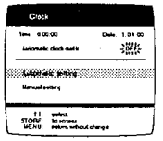
8 Press **STORE**.
- The clock will start.

9 Press **EXIT**.

Automatic Clock Setting

Follow steps **1** to **2** of the above procedure.

3 Select **Automatic setting**.



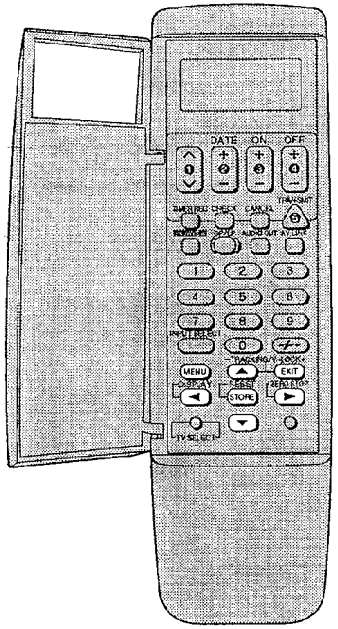
4 Press **STORE**.
- The clock is set automatically.

Notes:
- The clock operates for at least 60 minutes by its backup system in the event of power failure.
- When the item **"Automatic clock-set"** is ON on screen display, Automatic time correcting function is activated.
  The Automatic time correcting function is only activated when the power is off. This function is not activated during timer recording standby mode.

Settings Usings On Screen Display

Preparations

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.

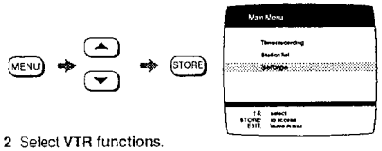


VTR functions

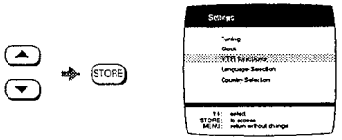
On Screen Display

1 Press **MENU**, and then select **Settings**.

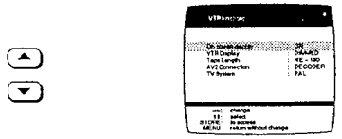
On Screen Display



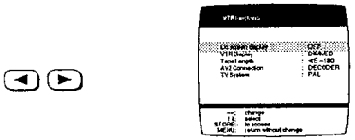
2 Select **VTR functions**.



3 Select **On screen display**.



4 Select **ON** or **OFF**.



ON: The On Screen Display will appear on the TV screen by pressing **OSD**.
OFF: The On Screen Display will not appear even if **OSD** is pressed.

VTR Display

1 Select **VTR Display**.

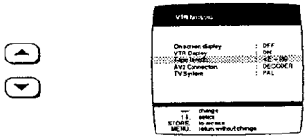
On Screen Display

2 Select **ON, OFF** or **DIMMED**.

ON: When VTR is turned off, the characters are lit in the VTR display.
OFF: When VTR is turned off, the characters are not lit in the VTR display.
DIMMED: When VTR is turned off, the characters are dimmed in the VTR display.

To select the Corresponding Cassette Tape Length for Displaying the Approximate Remaining Tape Time

1 Select **Tape Length**.



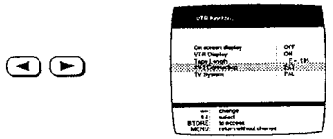
2 Select the corresponding cassette tape length.

◄ E-180: For E30, -60, -90, -120 and -180 tapes.
E-195: For E195 tape.
E-240: For E240 tape.
E-260 ►: For E260 and -300 tapes.

AV2 Connection

1 Select **AV2 Connection**.

2 Select **EXT** or **DECODER**.

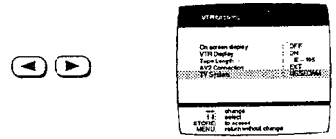


EXT: When another VTR is connected to the AV2 (DECODER/EXT) socket.
DECODER: When the decoder is connected to the AV2 (DECODER/EXT) socket.

To set the Colour TV System

1 Select **TV System**.

2 Select **PAL** or **MESECAM**.



- Set according to the colour TV system used during playback or external recording.

After All Settings are selected

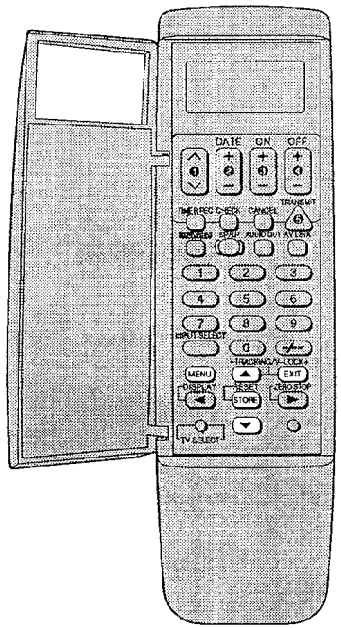
Press **STORE**, and then press **EXIT** to make On Screen Display disappear.

STORE ➡ EXIT

Setting the Remote Controller for Operation of your TV

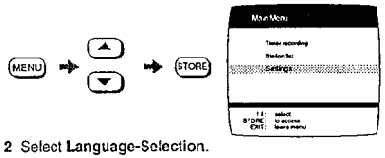
Language-Selection

To change the language setting for On Screen Display, follow the steps below.

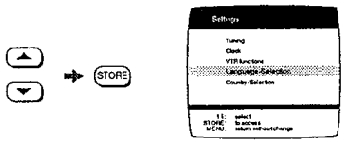


1 Press **MENU**, and then select **Settings**.

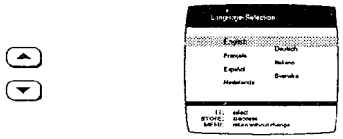
On Screen Display



2 Select **Language-Selection**.



3 Select the desired language.



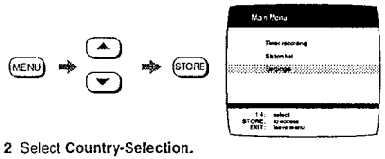
4 Press **STORE**, and then press **EXIT**.

STORE ➡ EXIT

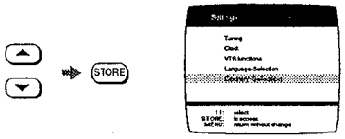
Country-Selection

To change the country setting, follow the steps below.

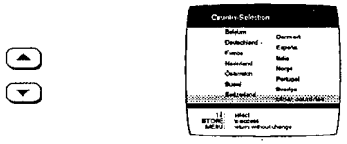
1 Press **MENU**, and then select **Settings**.



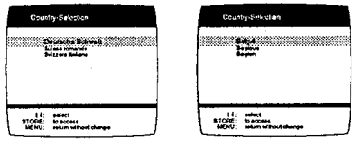
2 Select **Country-Selection**.



3 Select the desired country.



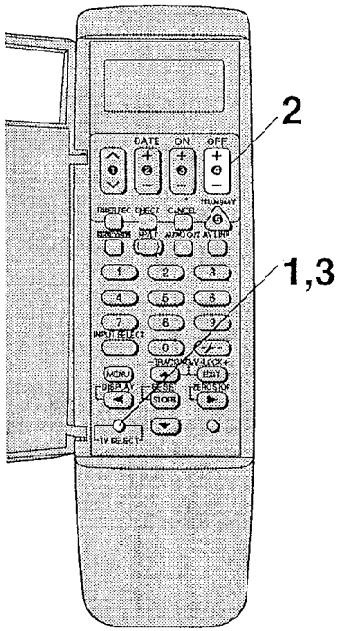
- When Switzerland or Belgium has been selected, operation moves to the screen which follows. Select the item in accordance with the language required.



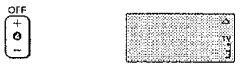
4 Press **STORE**, and then press **EXIT**.

STORE ➡ EXIT

You can operate some TV manufacturers (see next page) using the supplied Remote Controller after this setting up.



Preparation
Turn on the TV.

Operations	Display Symbols
1 Keep **TV SELECT** pressed for more than 2 seconds.	
2 Press **OFF** several times.	
3 Press **TV SELECT**.	

- When the number matches the manufacturer of your TV, the TV's power is turned off.

Read through the information on the following page as well.

How to change the number
Each time the "+" side of **OFF** is pressed, the number is counted up by one as follows:

→1→2→3...28→

When the "–" side is pressed, the number is counted down by one in the reverse order to that indicated above.

Note:
Some TV models cannot be operated using this remote controller.

Number	Manufacturer
1–4	Panasonic
5	GRUNDIG, Blaupunkt, SIEMENS
6	PHILIPS, LOEWE, SAMSUNG, RADIOLA, DUAL, PYE, BUSH, GOODMANS, ELEMIS, CURTIS
7	SONY
8	METZ
9*	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA
10*	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS
11*	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA
12*	FERGUSON, TELEFUNKEN, GOODMANS, SABA
13*	TELEFUNKEN
14*	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA
15*	FERGUSON, THOMSON, TELEFUNKEN, GOODMANS, SABA, NORDMENDE, BRANDT
16*	TELEFUNKEN
17, 18	HITACHI
19	SIEMENS
20	SAMSUNG
21	ITT, NOKIA, SELECO
22	NOKIA, SALORA
23	MIVAR
24	TOSHIBA
25	SANYO
26	SHARP
27	JVC
28	MITSUBISHI

When a TV manufacturer has the plural number
For example, When the number is 1, 2, 3 or 4 (Panasonic):
When the TV's power is turned off in step 2 above, turn it back on and adjust the TV's volume using this remote controller. The volume can be adjusted if the number matches the TV manufacturer. If it is not possible to adjust the TV's volume, try setting the number (1 to 4) to match the TV manufacturer again until the volume can be adjusted.

***When the number is 9–16**
How to change the programme position of TV:

1 Press ∧ **(TV)** to make **POS** appear on screen display.

2 Press **VOLUME** + or −.
- To adjust the TV's volume using the remote controller after that, press ∧ (TV) to make **POS** on screen display disappear and then adjust the volume. For some models, **POS** disappears automatically after several seconds. In these cases, this operation is not necessary.

Note:
FERGUSON, THOMSON, TELEFUNKEN, GOODMANS and SABA have plural numbers. Although some models may operate with any of these numbers, other models may operate with only one number. Check each number in turn, and set the optimal number.

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

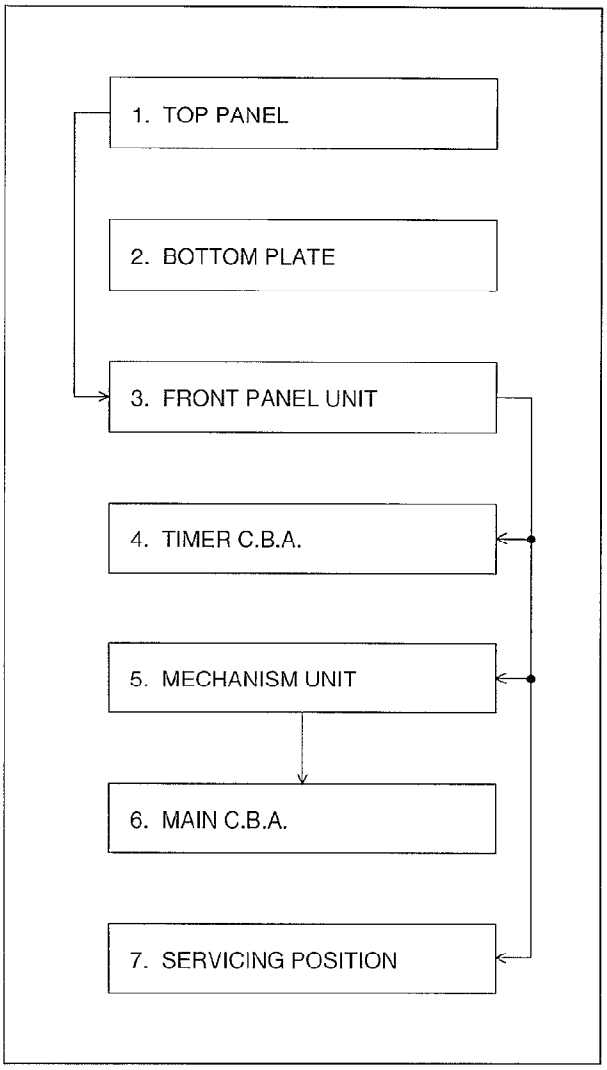


Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove..... 4 Screws (A)

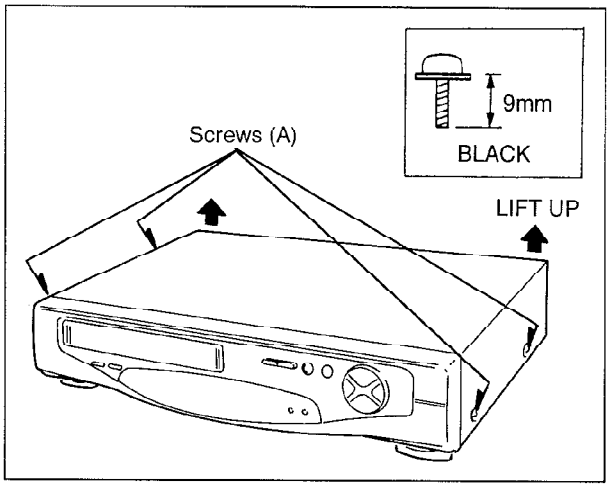


Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Remove..... Screw (B)
Remove..... 2 Screws (C)
Unlock ..... 4 tabs (D)

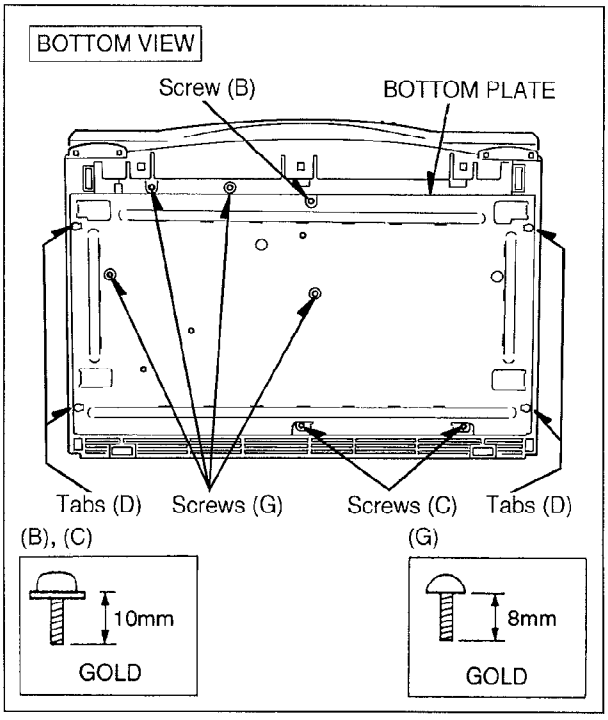


Fig. D3

3. REMOVAL OF THE FRONT PANEL UNIT

Remove..... Screw (D)
Unlock..... 8 Tabs (E)

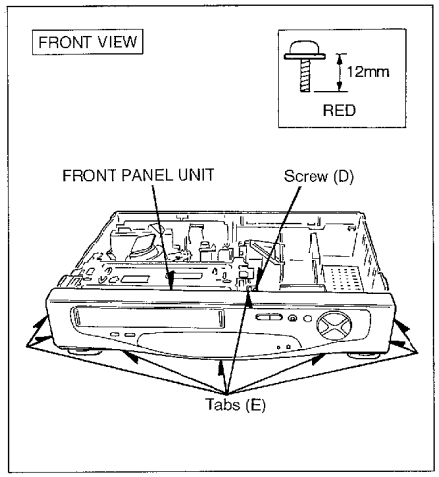


Fig. D4

4. REMOVAL OF THE TIMER C.B.A.

Unlock..... 5 Tabs (F)

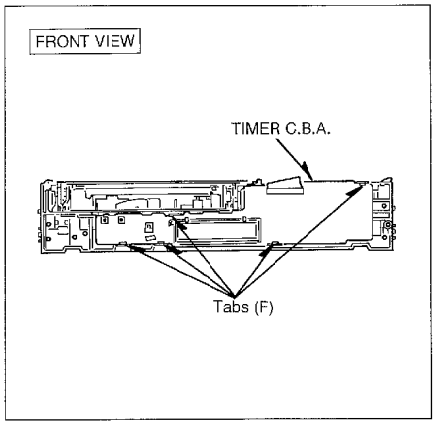


Fig. D5

5. REMOVAL OF THE MECHANISM UNIT

Remove..... 3 Screws (G) [Fig. D3]
Remove..... 3 Screws (H)
Remove..... Screw (I)
Unlock..... Tab (J) and PACK HOLDER

6. REMOVAL OF THE MAIN C.B.A.

Remove..... 2 Screws (C) [Fig. D3]
Unlock..... 7 Tabs (K)

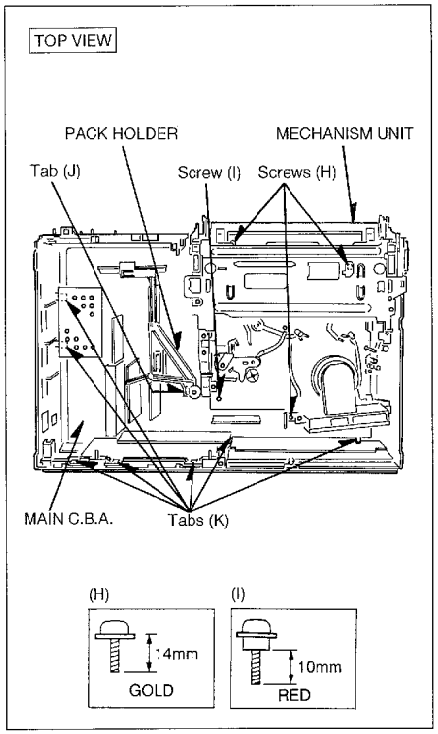


Fig. D6

7. SERVICING POSITION

Remove..... 2 Screws (C) [Fig. D3]
Remove..... 3 Screws (H)
Remove..... Screw (I)
Unlock..... Tab (J) and PACK HOLDER
Unlock..... 7 Tabs (K)

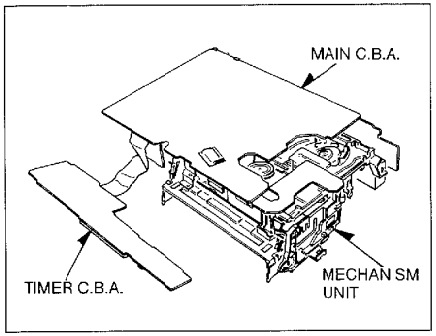


Fig. D7

2-2 MECHANICAL ADJUSTMENT PROCEDURES

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manua for K Mechanical Chassis. (Order No. VRD9307M131)

CAUTIONS:

To make a Adjustment Mode for Tape Interchangeability, there are two ways to turn off the Auto Tracking.

(1) Connect a jumper wire (K2501) which has been cut as shown in Fig. M1.
After finishing the adjustment, disconnect the jumper wire.
(2) Press the "FF", "REW" and "EJECT" buttons 3 times to set the Service Mode 2.

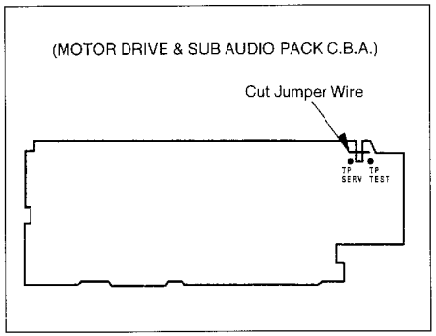


Fig. M1

2-3. DISASSEMBLY PROCEDURES OF MECHANISM

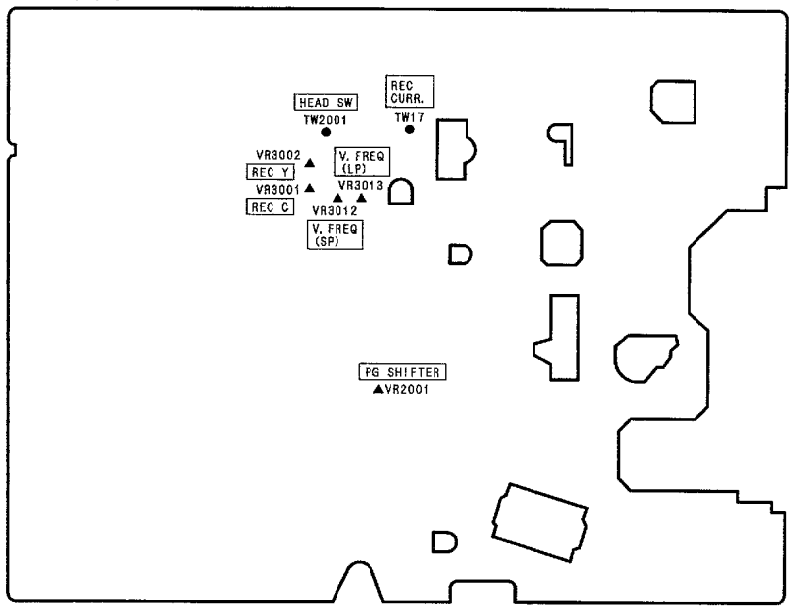
The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

2-4. ASSEMBLY PROCEDURES OF MECHANISM

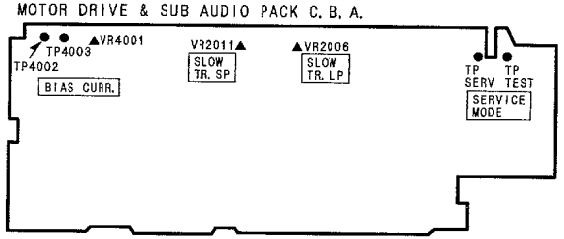
The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VRD9307M131)

LOCATION OF TEST POINTS & CONTROLS

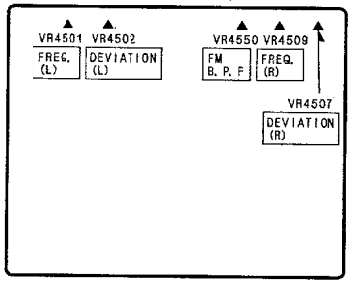
MAIN C. B. A.



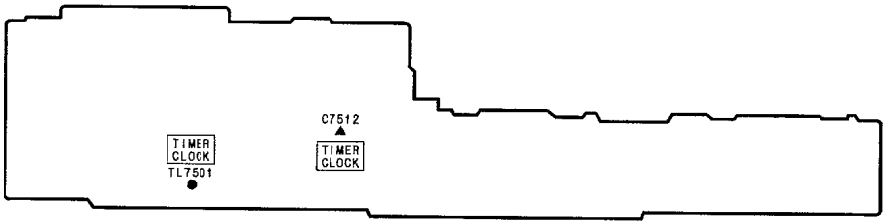
MOTOR DRIVE & SUB AUDIO PACK C. B. A.



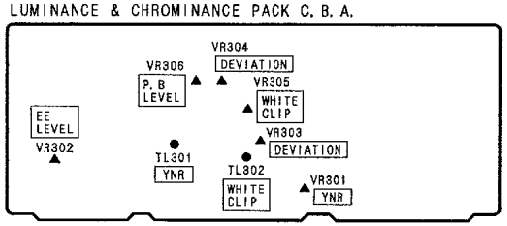
Hi-Fi AUDIO PACK C. B. A.



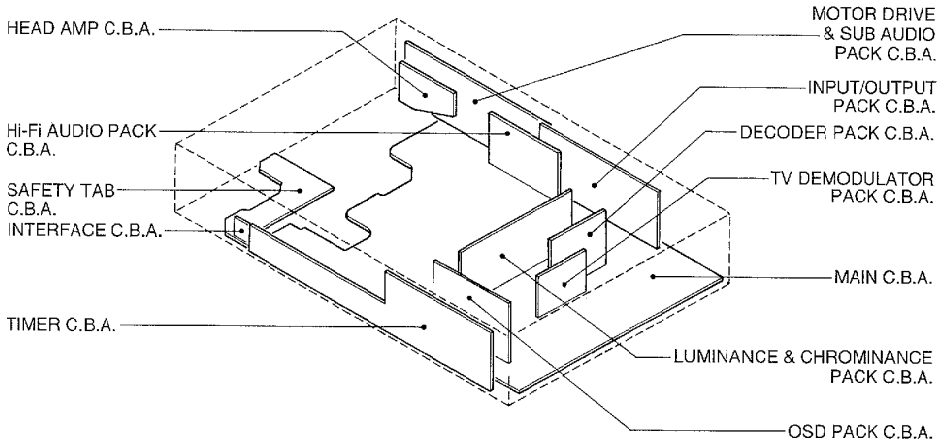
TIMER C. B. A.



LUMINANCE & CHROMINANCE PACK C. B. A.



CIRCUIT BOARD LAYOUT



2-5. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-5-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

1. Dual-Trace Oscilloscope. (More than 35MHz)
   Voltage Range: 0.005-5V/div
   Frequency Range: DC-35MHz
   Probes: 10:1 OR 1:1
2. Frequency Counter.
   Frequency Range: 0-10MHz
   Probes: 1:1
3. Universal Counter.
4. Digital Volt Meter. (D.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFJ8125H3F)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.
12. DC Power Supply.

2-5-2. PREPARATION

During adjustment, set each selector as follows: when no indication in the procedure.

CVC SW .....ON
TAPE SPEED .....SP
CHANNEL.....AV1
TEST SIGNAL SW (REAR) .....OFF

2-5-3. HOW TO READ ADJUSTMENT PROCEDURES

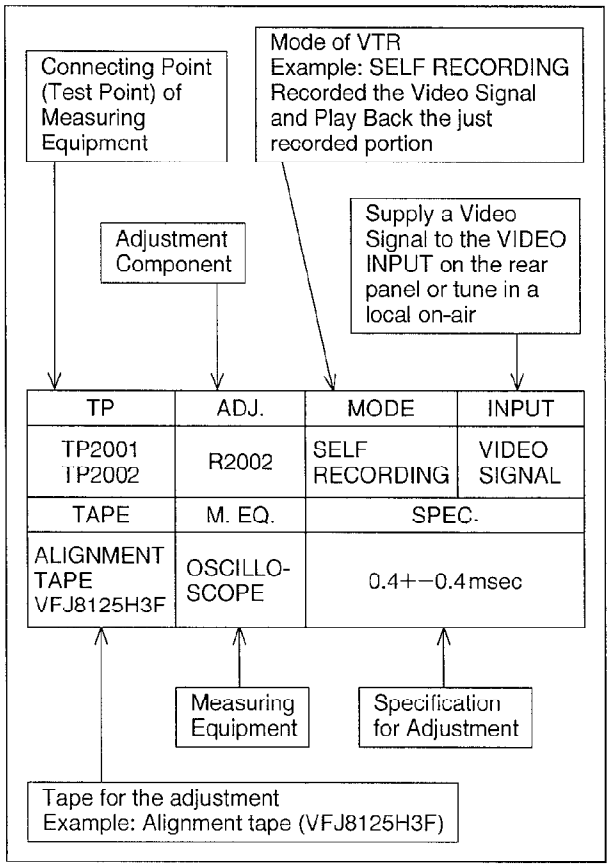


Fig. E1

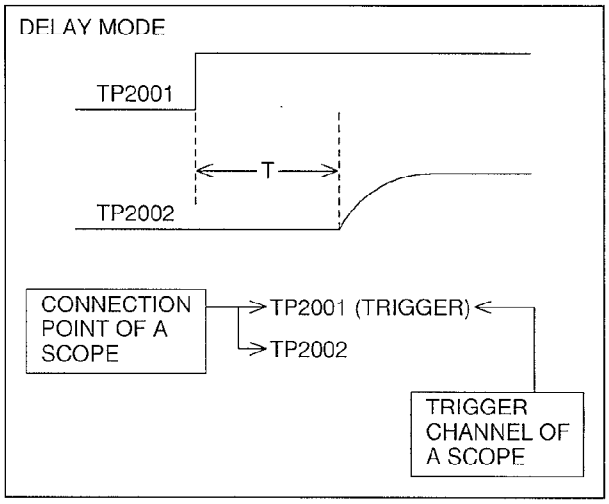


Fig. E2

SERVO SECTION

2-5-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TW2001 VIDEO OUT	VR2001	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	7.0+−0.5 (H)	

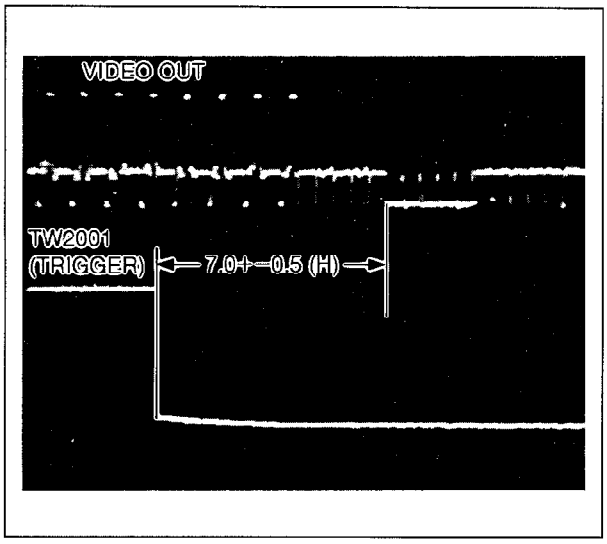


Fig. E3

2-5-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2011 (SP) VR2006 (LP)	(SELF RECORD) SLOW	CCIR PATTERN
TAPE	M. EQ.	SPEC.	
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)	

Note: 1. Before this adjustment, connect a jumper wire which has been cut as shown in Fig. E4 or set the service mode 2 (refer to section 2-2).
2. After connecting a jumper wire or setting the service mode 2, press the TRACKING (+) and (−) buttons on the Remote Controller simultaneously to set the tracking to centre fix position.
3. After this adjustment, disconnect a jumper wire or cancel the service mode.

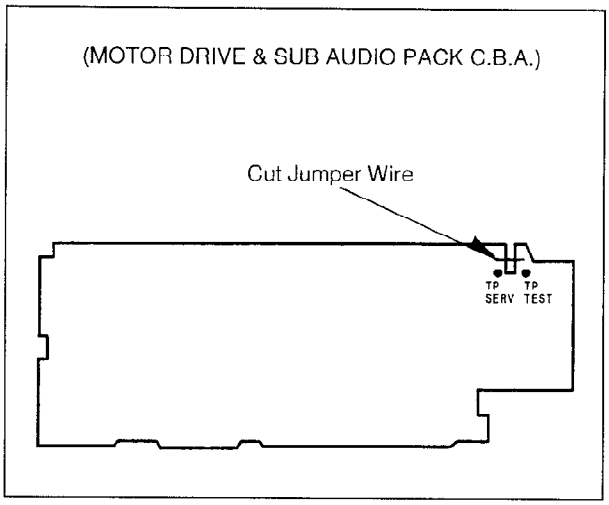


Fig. E4

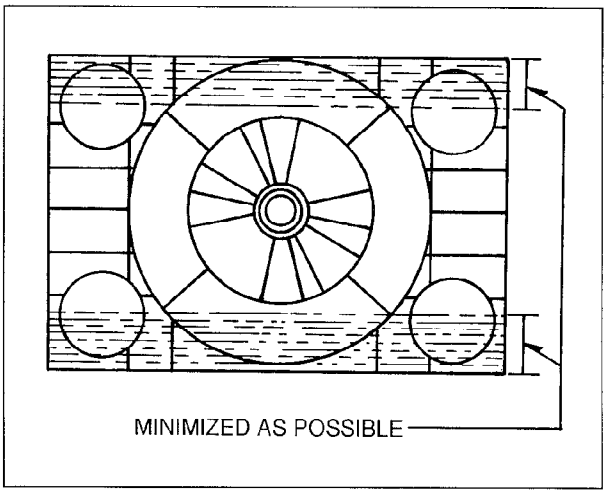


Fig. E5

LUMINANCE & CHROMINANCE SECTION

2-5-6. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TW17	VR3002 (Y) VR3001 (C)	SP RECORDING	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE	Y=120+−5 (mVp-p) C=38+−2 (mVp-p)	

Note: 1. Adjust the Luminance level until the peak level of V-SYNC is 120+−5mVp-p.
2. When adjusting the Chrominance level, Supply +5V DC to Pin 6 of PP3001 to eliminate Luminance component.

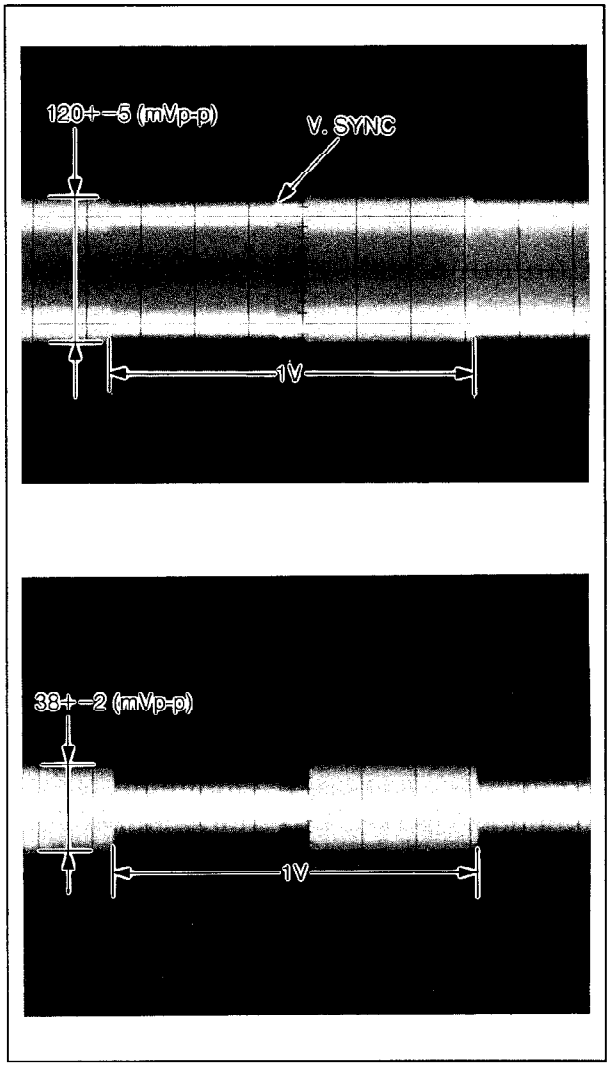
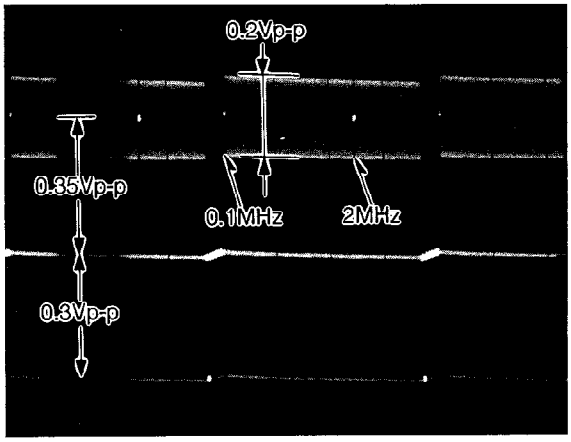


Fig. E6

2-5-7. VIDEO FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3012 (SP) VR3013 (LP)	SP/LP (SELF RECORD) PLAYBACK	VIDEO SWEEP SIGNAL (Shown in Fig. E7)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO- SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+−1 (dB) (90−110%) LP: 0+−1 (dB) (90−110%)	

Note: 1. Set the Video Sweep Signal as shown in Fig. E7.
2. Set the CVC SW to OFF position.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E7

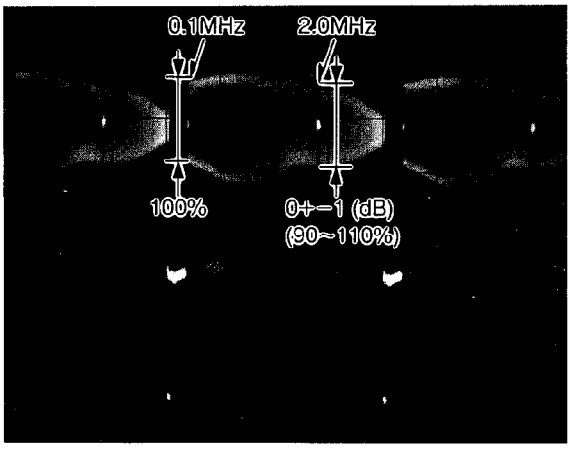


Fig. E8

2-5-8. EE LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR302	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	Y: 2.0+−0.1 Vp-p	

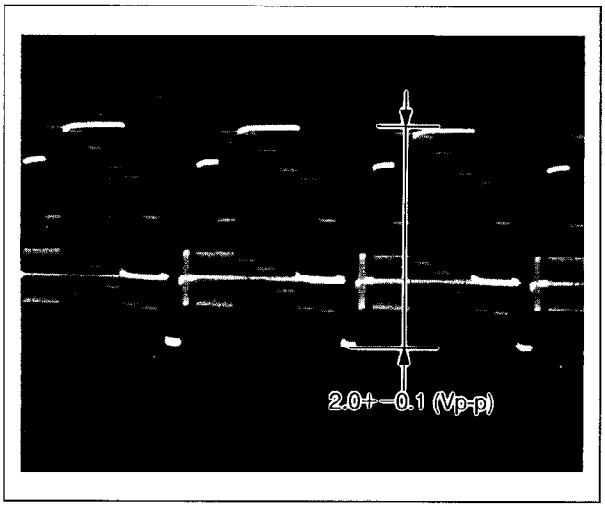


Fig. E9

2-5-9. WHITE CLIP ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC302-80 (TL302)	VR305	RECORDING	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	WHITE CLIP LEVEL: 185+−3%	

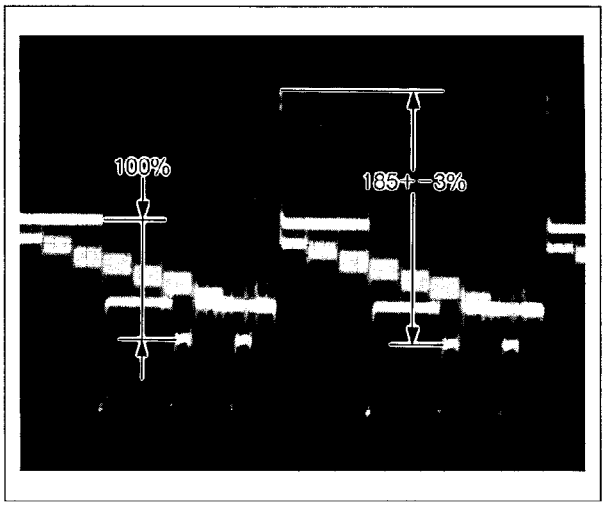


Fig. E10

2-5-10. PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR306	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFJ8125H3F	OSCILLO-SCOPE	Y: 2.0+−0.1 Vp-p CYAN: 1.1+−0.3 Vp-p	

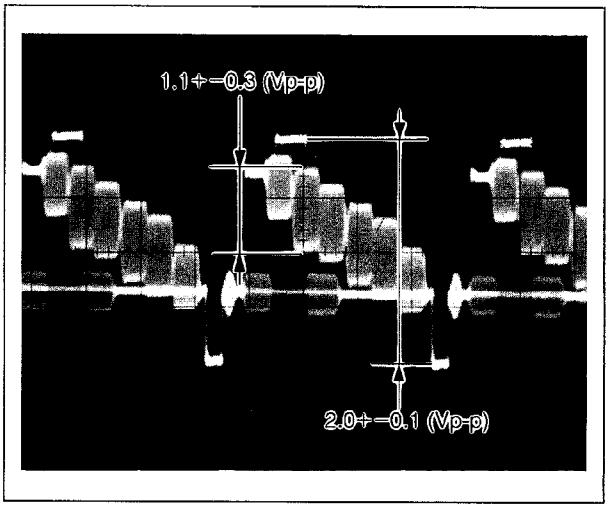


Fig. E11

2-5-11. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR303 VR304	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y: 2.0+−0.1 (Vp-p) (VIDEO: SYNC=70 : 30)	

Note: 1. Before this adjustment, the PLAYBACK LEVEL ADJUSTMENT (2-5-10) must be done.
2. Record the colour bar signal and adjust VR303 and VR304 during recording.
3. Playback the just recorded portion and confirm the playback Y-signal level is 2.0+−0.1 Vp-p.
4. If the signal level is out of the specification, repeat 2 and 3 until the signal level is the specification.

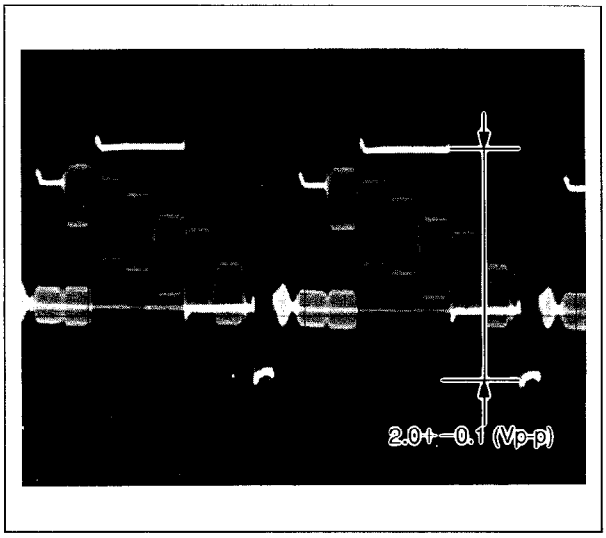


Fig. F12

2-5-12 YNR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC302-71 (TL301)	VR301	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMUM	

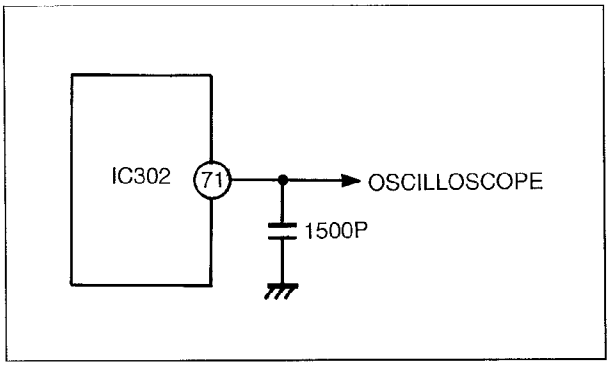


Fig. E13

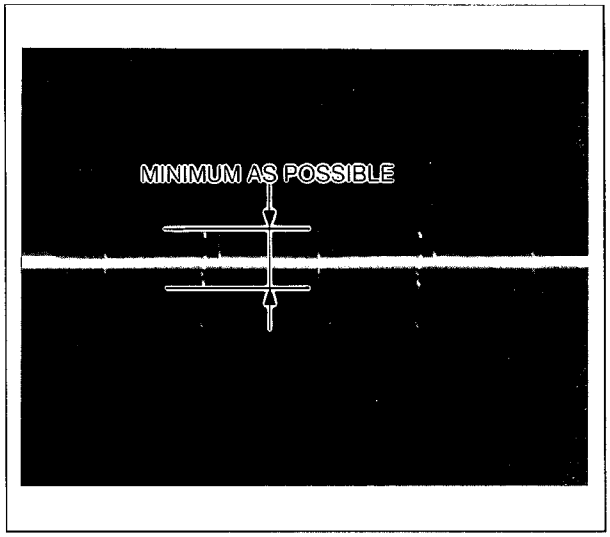


Fig. E14

AUDIO SECTION

2-5-13. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT) TP4003 (GND)	VR4001	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	D.V.M.	2.6+−0.1 (mVrms)	

Note: 1. Connect the Audio Input and GND.

2-5-14. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4501 (L) VR4509 (R)	SP RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	FREQUENCY COUNTER	L: 1.4+−0.003 (MHz) R: 1.8+−0.003 (MHz)	

2-5-15. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 and R4511 (L) BETWEEN VR4507 and R4561 (R)	VR4502 (L) VR4507 (R)	SP RECORDING	SINEWAVE 1KHz/−10dB (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M./ SINEWAVE GENERATOR	120 (mVrms)	

Note: 1. Before recording the sinewave, set the sinewave generator until the audio outputs (L) and (R) of AV1 are 400mVrms.

2-5-16. FM B.P.F. ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (I) IC4501-48 (R)	VR4550	PLAYBACK	SINEWAVE 1.608MHz/ 200mVp-p (PK4003-8)
TAPE	M. EQ.	SPEC.	
NTSC RECORDED TAPE	OSCILLO-SCOPE/ SINEWAVE GENERATOR	Lch (IC4501-33)= Rch (IC4501-48)	

Note: 1. Disconnect P501 (from MAIN C.B.A. to HEAD AMP PACK C.B.A.).
2. The GND lead of oscilloscope must be connected to GND on HIFI AUDIO PACK C.B.A. to reduce the noise.
3. Supply the sinewave signal (1.608MHz/200mVp-p) to PK4003-8.
4. After this adjustment, connect P501.

TIMER SECTION

2-5-17. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL7501	C7512	STOP	
TAPE	M. EQ.	SPEC.	
	UNIVERSAL COUNTER	7812.5+−0.015 (usec)	

SECTION 3
ABBREVIATIONS & BLOCK DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ	BIL. [H]	BILINGUAL Ⓗ
A. COMP	AUDIO COMPONENT SIGNAL	BIL/M1 [L]	BILINGUAL Ⓛ
A. COMPO	AUDIO COMPONENT SIGNAL	BS CLOCK	BS CLOCK
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ	BS DATA	BS DATA
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ	BS LCH IN	BS L CHANNEL INPUT
A. DEF [S]	AUDIO DEFEAT	BS MIX [H]	BS MIX Ⓗ
A. DEF [S] [L]	AUDIO DEFEAT	BS MON [H]	BS MONITOR Ⓗ
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ	BS MONI [H]	BS MONITOR Ⓗ
A. DUB [H]	AUDIO DUBBING Ⓗ	BS RCH IN	BS R CHANNEL INPUT
A. ERASE	AUDIO ERASE	BS VIDEO	BS VIDEO SIGNAL
A. H. SW	AUDIO HEAD SWITCHING PULSE	BS VIDEO/BS1	BS VIDEO SIGNAL
A. HEAD [R]	AUDIO HEAD (REC)	BS [H]	BS Ⓗ
A. HEAD [W]	AUDIO HEAD (PLAY)	BS. LEVEL	BS LEVEL
A. IN [L]	AUDIO INPUT (L)	BS. M [H]	BS MONITOR Ⓗ
A. IN [R]	AUDIO INPUT (R)	BS/VTR [H]	BS/VTR Ⓗ
A. MUT [H]	AUDIO MUTE Ⓗ	BUS CLK	BUS CLOCK
A. MUTE [H]	AUDIO MUTE Ⓗ	BUS LSN	BUS LISTEN
A. OUT [L]	AUDIO OUTPUT (L)	BUS TLK	BUS TALK
A. OUT [R]	AUDIO OUTPUT (R)	BUZZER	BUZZER
A. RF OUT	AUDIO RF SIGNAL OUTPUT	CAP EC	CAPSTAN TORQUE CONTROL
A/VS/S. DATA	AV SW/SERIAL DATA	CAP M GND	CAPSTAN MOTOR GND
AC ONLINE	AC ONLINE	CAP. ET	CAPSTAN TORQUE CONTROL
AC. O/EE. H	AC ONLINE/EE Ⓗ	CAP. FG1	CAPSTAN FG1 PULSE
AFC S C	AFC S CURVE	CAP. FG2	CAPSTAN FG2 PULSE
AFC [S]	AFC S CURVE	CAS. SW	CASSETTE SW
AFC. DEF	AFC DEFEAT	CCN	PLAYBACK CONTROL SIGNAL (−)
ARFC OUT	AUDIO RF SIGNAL OUTPUT	CCP	PLAYBACK CONTROL SIGNAL (+)
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL	CHM	CONTROL SIGNAL (+)
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI	CHP	CONTROL SIGNAL (−)
		CINEM [L]	CINEMA Ⓛ
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL	CINEMA [L]	CINEMA Ⓛ
		CINEMA/MIX	CINEMA/MIX
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL	CKL	RATCH LOCK
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE	CKS	SHIFT LOCK
AUDIO IN [L]	AUDIO INPUT (L)	CL	CLOCK
AUDIO IN [R]	AUDIO INPUT (R)	CLK	CLOCK
AUDIO OUT [L]	AUDIO OUTPUT (L)	CLK (C.G)	CLOCK
AUDIO OUT [R]	AUDIO OUTPUT (R)	CLOCK. IN	CLOCK INPUT
AUDIO SELECT [H]	AUDIO SELECT Ⓗ	CLP	CLAMP
AUDIO. L	AUDIO (L)	COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
AUDIO. R	AUDIO (R)	COLOR [H]	COLOUR Ⓗ
AV CNT	AV CONTROL	CONV	CONVERTOR
AV CTL	AV CONTROL	CS	CHIP SELECT
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK	CTL GND	CONTROL GND
AV. C.M.	AV CONTROL MODE	CTL HEAD [+]	CONTROL HEAD (+)
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)	CTL HEAD [−]	CONTROL HEAD (−)
AVSW/METER. L	AV SW/LEVEL METER (L)	CTL [+]	CONTROL HEAD (+)
B MODE. H	B MODE Ⓗ	CTL [−]	CONTROL HEAD (−)
B.G.P	BURST GATE PULSE	CUE BIAS	CUE BIAS
BACKUP 5V	BACK UP 5V	CURRENT LIM	CURRENT LIMMITER
BAND. U.E.	BAND U	CYL ET	CYLINDER TORQUE CONTROL
BANDVL. D	BAND VL	CYL GND	CYLINDER GND
BI/MI [L]	BILINGUAL/MIX Ⓛ	D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
BIL	BILINGUAL	D. FM REC [L]	DELAIED FM RECORDING Ⓛ
BIL [L]	BILINGUAL Ⓛ	D. GND	DIGITAL GND

ABBREVIATIONS

D. REC [H]	DELAYED RECORDING Ⓗ	H. SYNC	HORIZONTAL SYNC
D4/S. LED	D4/STILL LED	H. AMP. SW	HEAD AMP SW PULSE
D4/STILLED	D4/STILL LED	H. P <R>	HEAD PHONE (R)
DAC [CLK]	TUNER DAC (CLOCK)	H. P <L>	HEAD PHONE (L)
DAC/FSCS	TUNER DAC/FS CHIP SELECT	H. P GND	HEAD PHONE GND
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ	H. P OUT [L]	HEAD PHONE OUTPUT (L)
DATA	DATA	H. P OUT [R]	HEAD PHONE OUTPUT (R)
DECODER [L]	DECODER (L)	H. SW	HEAD SW PULSE
DECODER [R]	DECODER (R)	HEAD PHONE [L]	HEAD PHONE (L)
DEW	DEW	HEAD PHONE [R]	HEAD PHONE (R)
DEW SNS	DEW SENSOR	HEAD SW	HEAD SW
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ	HEATER [+]	HEATER (+)
E. REC 5V	EXCEPT RECORDING 5V	HEATER [−]	HEATER (−)
EC	ERR0R TORQUE CONTROL	HSS	HORIZONTAL SYNC SIGNAL
ECR	ERROR TORQUE CONTROL	HTR [+]	HEATER (+)
	REFERENCE VOLTAGE	HTR [−]	HEATER (−)
EDT TRIG [L]	EDIT TRIGGER Ⓛ	I RFE	REFERENCE CURRENT
EDIT [H]	EDIT Ⓗ	ICL	CONTROL AGC CIRCUIT
EE [H]	EE Ⓗ	IF	INTERMEDIATE FREQUENCY
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ	IN SELA1	INPUT SELECT A1 POSITION
EE. VV. TR	EE/VV/TRICK PLAY	IN SELA2	INPUT SELECT A2 POSITION
EJECT. PO	EJECT POSITION	IN SELA3	INPUT SELECT A3 POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK	INS L/R [L]	INSERT Lch/Rch Ⓛ
ENV. SEL	ENVELOPE SELECT	INS. [H]	INSERT Ⓗ
ENVE. OUT	ENVELOPE OUTPUT	INSEL A1	INPUT SELECT A1 POSITION
ENVE. SEL	ENVELOPE SELECT	INSEL A2	INPUT SELECT A2 POSITION
ENV SELECT	ENVELOPE SELECT	INSERT	INSERT
EP [H]	LP Ⓗ	INSERT [H]	INSERT Ⓗ
EP/LP [H]	LP Ⓗ	IO CS	INPUT/OUTPUT CHIP SELECT
EP/LP/SP	LP/SP	JOG1	JOG1
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ	JOG S3 LED/FOWRD	JOG LED/FORWARD LED
EPROMCS	EPROM CHIP SELECT	JOG/F. LED	JOG LED/FORWARD LED
EX. REC 5V	EXCEPT RECORDING 5V	JSB [H]	JSB Ⓗ
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ	JST. CLCK	JUST CLOCK
FG1 IN	FG1 PULSE INPUT	JST. CLK	JUST CLOCK
FG2 IN	FG2 PULSE INPUT	JST. CLOCK	JUST CLOCK
FILTER ADJUSTMEN	FILTER ADJUSTMENT	L. OUT	Lch OUTPUT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ	L. CH [H]	Lch Ⓗ
FLY ON [H]	FLYING ERASE E HEAD ON Ⓗ	L. CH [L]	Lch Ⓛ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ	LED (MAIN)	LED (MAIN)
FM MUT [H]	FM AUDIO MUTE Ⓗ	LED (STEREO)	LED (STEREO)
FM MUTE [H]	FM AUDIO MUTE Ⓗ	LED (SUB)	LED (SUB)
FM OUT [L]	FM OUTPUT (L)	LED CKL	LED SERIAL CLOCK
FM OUT [R]	FM OUTPUT (R)	LED CKS	LED SERIAL CLOCK
FM PACK OUT [L]	FM PACK OUTPUT (L)	LED DATA	LED SERIAL DATA
FM PACK OUT [R]	FM PACK OUTPUT (R)	LINE IN 1 [L]	LINE INPUT 1 (L)
FM/BS SEL [L]	FM/BS SELECT (L)	LINE IN 1 [R]	LINE INPUT 1 (R)
FM/BS SEL [R]	FM/BS SELECT (R)	LINE IN 2 [L]	LINE INPUT 2 (L)
FS. CLK	FS CLOCK	LINE IN 2 [R]	LINE INPUT 2 (R)
FUL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN V	LINE INPUT VIDEO
FULL. E [H]	FULL ERASE HEAD ON Ⓗ	LINE IN [L]	LINE INPUT (L)
FULL. E. 12V	FULL ERASE 12V	LINE IN [R]	LINE INPUT (R)
GND [A]	GND (ANALOGUE)	LINE OUT [L]	LINE OUTPUT (L)
GND [TU]	GND (TUNER)	LINE OUT [R]	LINE OUTPUT (R)
GND/N. SW. 12V	GND/NON SW 12V	LP [H]	LP Ⓗ

LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓑ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓒ
NOL [H]	PAL Ⓑ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓡ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT
P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓡ
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓡ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓟ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓟ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓡ/STOP Ⓜ/FORWARD Ⓕ
RCH [H]	Rch Ⓡ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓒ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOROR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [−]	REVIEW MOTOR (−)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

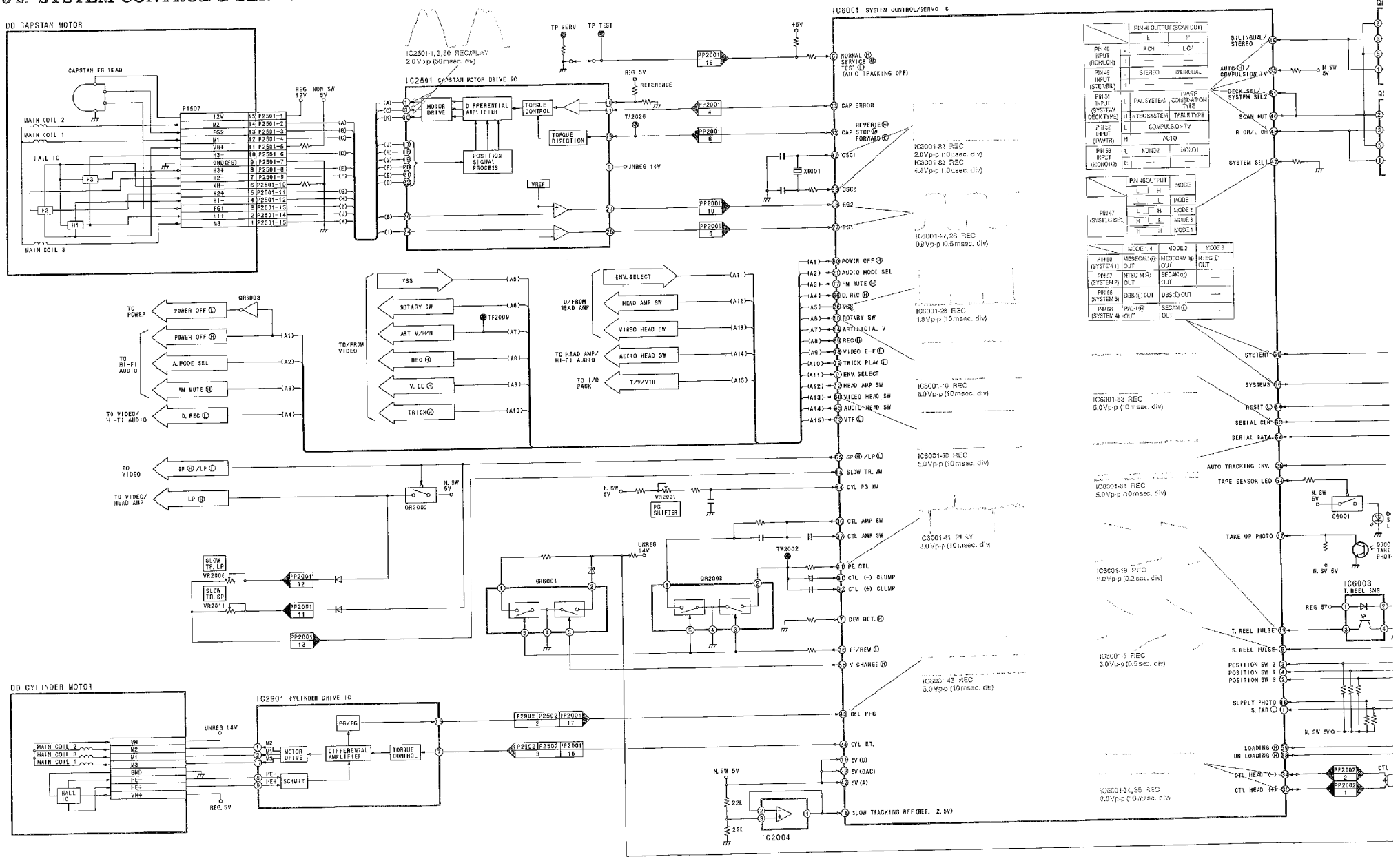
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓡ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓟ/NORMAL Ⓡ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓡ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓡ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	RERERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓡ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

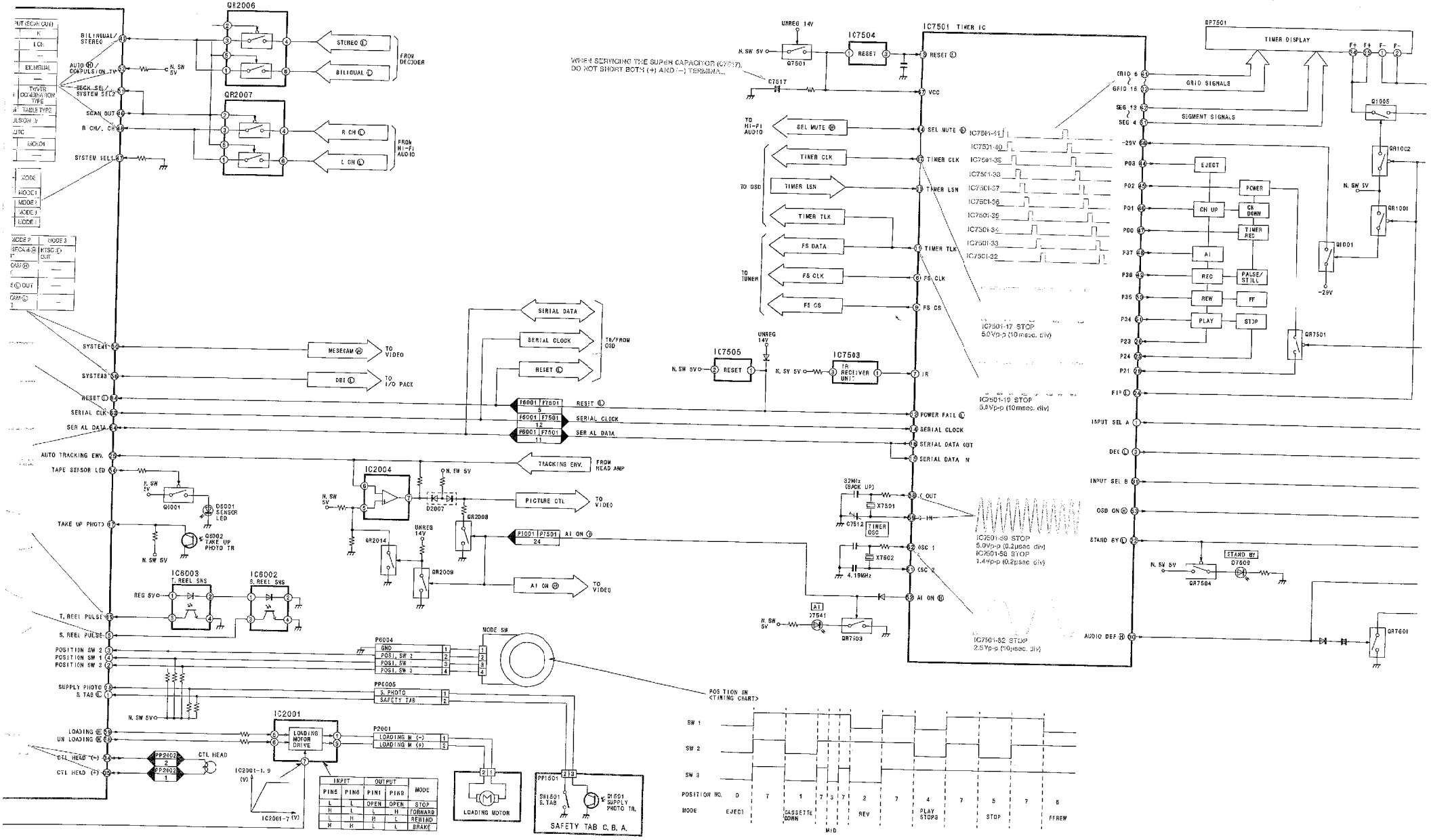
TRUTH TABLE

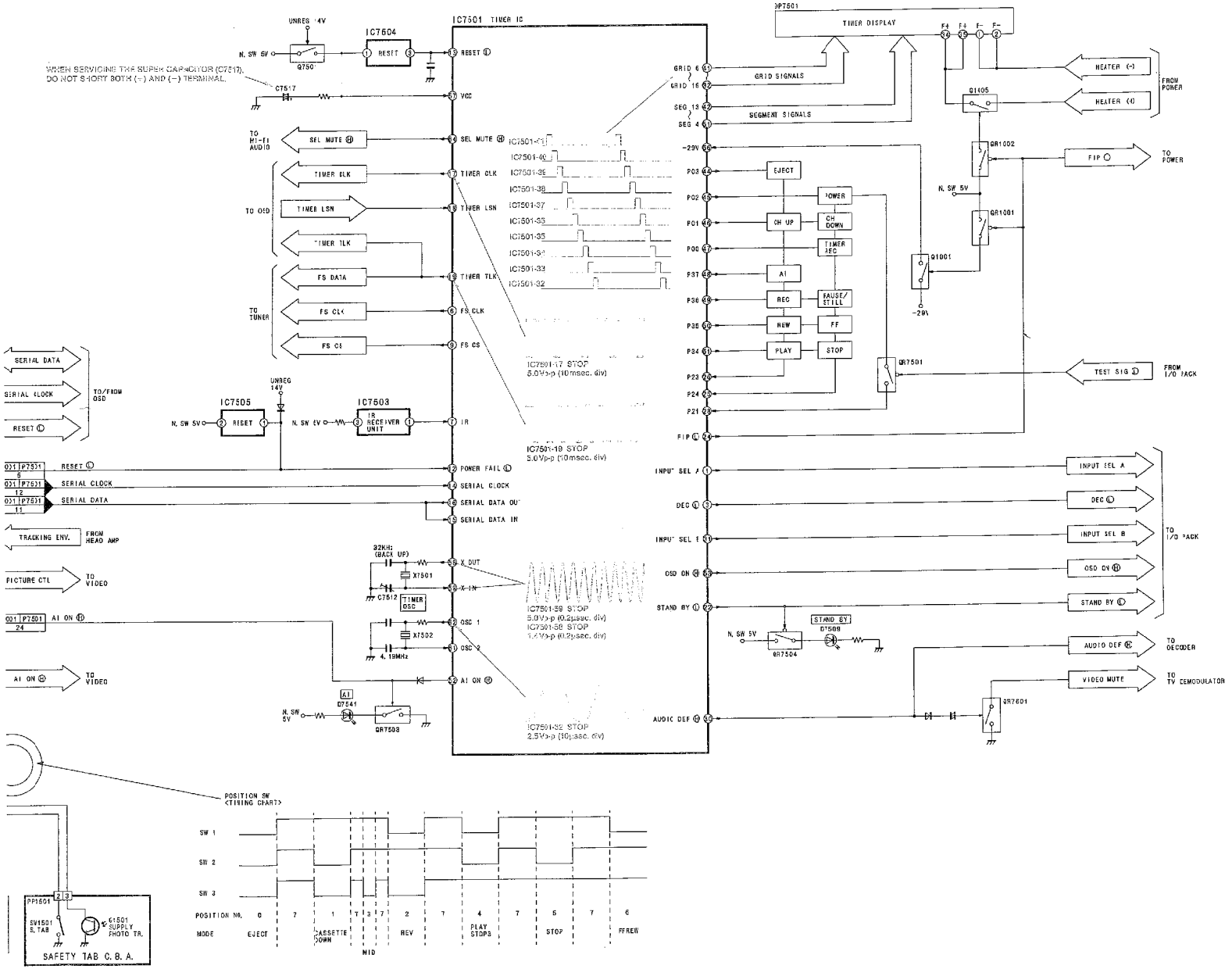
IC3904 INPUT								IC3904 OUTPUT								VIDEO OUTPUT RESULT				AUDIO OUTPUT RESULT							
POWER	AV2 SLCT	DEC S_CT	EE/VV	OSD ON	INPUT CH			AV2 PB	AV2 OUT SLCT		VTR IN SLCT		AV1 OUT SLCT	AV1 PB	RGB SW	FM NS	AV1 OUT	AV2 OUT	VTR IN	VTR OUT	AV1 OUT (L)	AV1 OUT (R)	AV2 OUT (L)	AV2 OUT (R)	AUDIO IN (L)	AUDIO IN (R)	AUDIO OUT (L)	AUDIO OUT (R)
⑥	④	①	⑦	⑪	②	⑧	⑨	③	⑯	⑰	⑱	⑲	⑫	⑬	⑭	⑮	(AV1-⑲)	(AV2-⑲)	(PP3901-3)	(PP3901-7)	(AV1-③)	(AV1-①)	(AV2-③)	(AV2-①)	(PP3902-9)	(PP3902-10)	(PP3902-6)	(PP3902-7)
OFF Ⓛ	----	----	----	----	--	--	--	L	L	L	L	L	L	L	L	L	AV2 IN	AV1 IN	TUNER	TUNER	AV2 IN (L)	AV2 IN (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
								H	L	L	L	L	L	H	H	L	AV2 IN	AV1 IN	TUNER	TUNER	AV2 IN (L)	AV2 IN (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
ON Ⓗ	VTR Ⓗ	----	EE Ⓗ	OFF Ⓛ	H	L	L	----	H	H	L	L	H	L	L	L	VTR OUT	VTR OUT	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	-----	-----	TUNER	TUNER
					L	L	L	----	H	H	L	L	H	L	L	L	VTR OUT	VTR OUT	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	-----	-----	TUNER	TUNER
					H	L	H	----	H	H	L	H	H	L	L	H	VTR OUT	VTR OUT	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
					H	H	L	----	H	H	H	L	H	L	L	H	VTR OUT	VTR OUT	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
				ON Ⓗ	H	L	L	----	H	H	L	L	H	H	L	L	VTR OUT	VTR OUT	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	-----	-----	TUNER	TUNER
					L	L	L	----	H	H	L	L	H	H	L	L	VTR OUT	VTR OUT	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	-----	-----	TUNER	TUNER
					H	L	H	----	H	H	L	H	H	H	L	H	VTR OUT	VTR OUT	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
					H	H	L	----	H	H	H	L	H	H	H	H	VTR OUT	VTR OUT	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
			VV Ⓛ	----	H	L	L	----	H	H	L	L	H	H	L	L	VTR OUT	VTR OUT	TUNER	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	-----	-----	PLAYBACK	PLAYBACK
					L	L	L	----	H	H	L	L	H	H	L	L	VTR OUT	VTR OUT	TUNER	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	-----	-----	PLAYBACK	PLAYBACK
					H	L	H	----	H	H	L	H	H	H	L	H	VTR OUT	VTR OUT	AV1 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	PLAYBACK	PLAYBACK
					H	H	L	----	H	H	H	L	H	H	L	H	VTR OUT	VTR OUT	AV2 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AUDIO OUT (L)	AUDIO OUT (R)	AV2 IN (L)	AV2 IN (R)	PLAYBACK	PLAYBACK
	DECODER Ⓛ	TV Ⓗ	----	OFF Ⓛ	H	L	L	L	L	L	L	L	H	L	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
								H	L	L	L	L	L	H	H	L	AV2 IN	AV1 IN	TUNER	TUNER	AV2 IN (L)	AV2 IN (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
					L	L	L	L	L	H	L	L	H	L	L	L	VTR OUT	TUNER IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	-----	-----	TUNER	TUNER
								H	L	H	H	L	H	L	L	H	VTR OUT	TUNER IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	L	H	L	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
								H	L	L	H	L	L	H	H	H	AV2 IN	AV1 IN	AV2 IN	AV2 IN	AV2 IN (L)	AV2 IN (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	H	L	L	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
								H	L	L	H	L	L	H	H	H	AV2 IN	AV1 IN	AV2 IN	AV2 IN	AV2 IN (L)	AV2 IN (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
				ON Ⓗ	H	L	L	L	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
								H	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
					L	L	L	L	L	H	L	L	H	H	L	L	VTR OUT	TUNER IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	-----	-----	TUNER	TUNER
								H	L	H	H	L	H	H	H	H	VTR OUT	TUNER IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	L	H	L	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
								H	L	L	H	L	L	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	H	L	L	L	H	L	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
								H	L	L	H	L	L	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
		VTR Ⓛ	EE Ⓗ	OFF Ⓛ	H	L	L	L	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
								H	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
					L	L	L	L	L	H	L	L	H	H	L	L	VTR OUT	TUNER IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	-----	-----	TUNER	TUNER
								H	L	H	H	L	H	H	H	H	VTR OUT	TUNER IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	L	H	L	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	H	L	L	L	H	L	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
				ON Ⓗ	H	L	L	L	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
								H	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
					L	L	L	L	L	H	L	L	H	H	L	L	VTR OUT	TUNER IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	-----	-----	TUNER	TUNER
								H	L	H	H	L	H	H	H	H	VTR OUT	TUNER IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	L	H	L	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	H	L	L	L	H	L	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
				ON Ⓗ	H	L	L	L	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
								H	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	TUNER	TUNER
					L	L	L	L	L	H	L	L	H	H	L	L	VTR OUT	TUNER IN	TUNER	TUNER	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	-----	-----	TUNER	TUNER
								H	L	H	H	L	H	H	H	H	VTR OUT	TUNER IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	L	H	L	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV1 IN	AV1 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
					H	H	L	L	L	H	L	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	AV2 IN	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	AV2 IN (L)	AV2 IN (R)
			VV Ⓛ	----	H	L	L	L	L	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	PLAYBACK	PLAYBACK
								H	-	L	L	L	H	H	L	L	VTR OUT	AV1 IN	TUNER	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	-----	-----	PLAYBACK	PLAYBACK
					L	L	L	L	-	H	L	L	H	H	L	L	VTR OUT	TUNER IN	TUNER	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	-----	-----	PLAYBACK	PLAYBACK
								H	-	H	H	L	H	H	L	H	VTR OUT	TUNER IN	AV2 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	TUN A IN (L)	TUN A IN (R)	AV2 IN (L)	AV2 IN (R)	PLAYBACK	PLAYBACK
					H	L	H	L	-	L	H	L	H	H	L	H	VTR OUT	AV1 IN	AV1 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV1 IN (L)	AV1 IN (R)	PLAYBACK	PLAYBACK
								H	-	L	H	L	H	H	L	H	VTR OUT	AV1 IN	AV2 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 IN (L)	AV2 IN (R)	PLAYBACK	PLAYBACK
					H	H	L	L	-	L	H	L	H	H	L	H	VTR OUT	AV1 IN	AV2 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 N (R)	PLAYBACK	PLAYBACK	
								H	L	L	H	L	H	H	H	H	VTR OUT	AV1 IN	AV2 IN	PLAYBACK	AUDIO OUT (L)	AUDIO OUT (R)	AV1 IN (L)	AV1 IN (R)	AV2 N (R)	PLAYBACK	PLAYBACK	

INPUT CH SELECT			INPUT CH
DBS/CANAL	INPUT SLCT B	INPUT SLCT A	
②	⑧	⑨	
H	L	L	NORMAL TUNER
L	L	L	DBS/C+ TUNER
H	L	H	AV1
H	H	L	AV2

3-2. SYSTEM CONTROL & SERVO BLOCK DIAGRAM




QR2006
QR2007
BILINGUAL/ STEREO
AUTO COMPULSION TV
CHECK SEL/ SYSTEM SEL2
SCAN OUT
R CH/. CH
SYSTEM SEL1
STEREO
BILINGUAL
R CH
L CH
FROM DECODER
FROM HI-FI AUDIO
IC7501 TIMER IC
IC7504
RESET
VCC
SEL MUTE
TIMER CLK
TIMER LSN
TIMER TLK
FS DATA
FS CLK
FS CS
IR
POWER FAIL
SERIAL CLOCK
SERIAL DATA OUT
SERIAL DATA IN
IC7505
IC7503
IR RECEIVER UNIT
WHEN SERVICING THE SUPER CAPACITOR (C7517), DO NOT SHORT BOTH (+) AND (−) TERMINA...
C7517
Q7501
UNREG 14V
N. SW 5V
TO HI-FI AUDIO
TO OSD
TO TUNER
IC7501-41
IC7501-40
IC7501-39
IC7501-38
IC7501-37
IC7501-36
IC7501-35
IC7501-34
IC7501-33
IC7501-32
IC7501-17 STOP
5.0Vp-p (10msec. div)
IC7501-10 STOP
5.0Vp-p (10msec. div)
IC7501-59 STOP
5.0Vp-p (0.2μsec. div)
IC7501-58 STOP
1.4Vp-p (0.2μsec. div)
IC7501-52 STOP
2.5Vp-p (10μsec. div)
DP7501
TIMER DISPLAY
GRID SIGNALS
SEGMENT SIGNALS
EJECT
POWER
CH UP
CH DOWN
TIMER REC
AI
REC
PAUSE/ STILL
REW
FF
PLAY
STOP
Q1005
Q1002
Q1001
QR1002
QR1001
QR7501
-29V
SERIAL DATA
SERIAL CLOCK
RESET
TO/FROM OSD
MESECAM
DBE
TO VIDEO
TO I/O PACK
SYSTEM1
SYSTEM2
RESET
SERIAL CLK
SER AL DATA
P6001 P7501 5 RESET
P6001 P7501 12 SERIAL CLOCK
P6001 P7501 11 SER AL DATA
AUTO TRACKING ENV.
TAPE SENSOR LED
TAKE UP PHOTO
TRACKING ENV.
FROM HEAD AMP
Q8001
D8001 SENSOR LED
Q8002 TAKE UP PHOTO TR
IC2004
D2007
QR2008
QR2014
QR2009
PICTURE CTL
TO VIDEO
P1001 P7501 24 AI ON
AI ON
TO VIDEO
32MHz (BACK UP)
X7501
C7512
TIMER OSC
X7502
4.19MHz
OSC 1
OSC 2
AI
J7541
QR7503
IC6003
T. REEL SNS
IC6002
S. REEL SNS
REG 5V
T. REEL PULSE
S. REEL PULSE
POSITION SW 2
POSITION SW 1
POSITION SW 3
SUPPLY PHOTO
S. TAB
P6004
GND
POSI. SW 2
POSI. SW 3
NODE SW
PP6005
S. PHOTO
SAFETY TAB
IC2001
LOADING MOTOR DRIVE
LOADING
UN LOADING
CTL HEAD (−)
CTL HEAD (+)
P2001
LOADING M (−)
LOADING M (+)
PP2002
CTL HEAD
IC2001-1, 9 (V)
IC2001-7 (V)
INPUT
OUTPUT
PIN5
PIN6
PIN1
PIN9
MODE
STOP
FORWARD
REWIND
BRAKE
LOADING MOTOR
PP1601
SW1601 S.TAB
D1601 SUPPLY PHOTO TR.
SAFETY TAB C. B. A.
POSITION SW <TIMING CHART>
SW 1
SW 2
SW 3
POSITION NO.
MODE
EJECT
CASSETTE DOWN
MID
REV
PLAY STOP
STOP
FFREW
INPUT SEL A
DEC
INPUT SEL B
OSD ON
STAND BY
AUDIO DEF
STAND BY
D7509
QR7504
QR7601

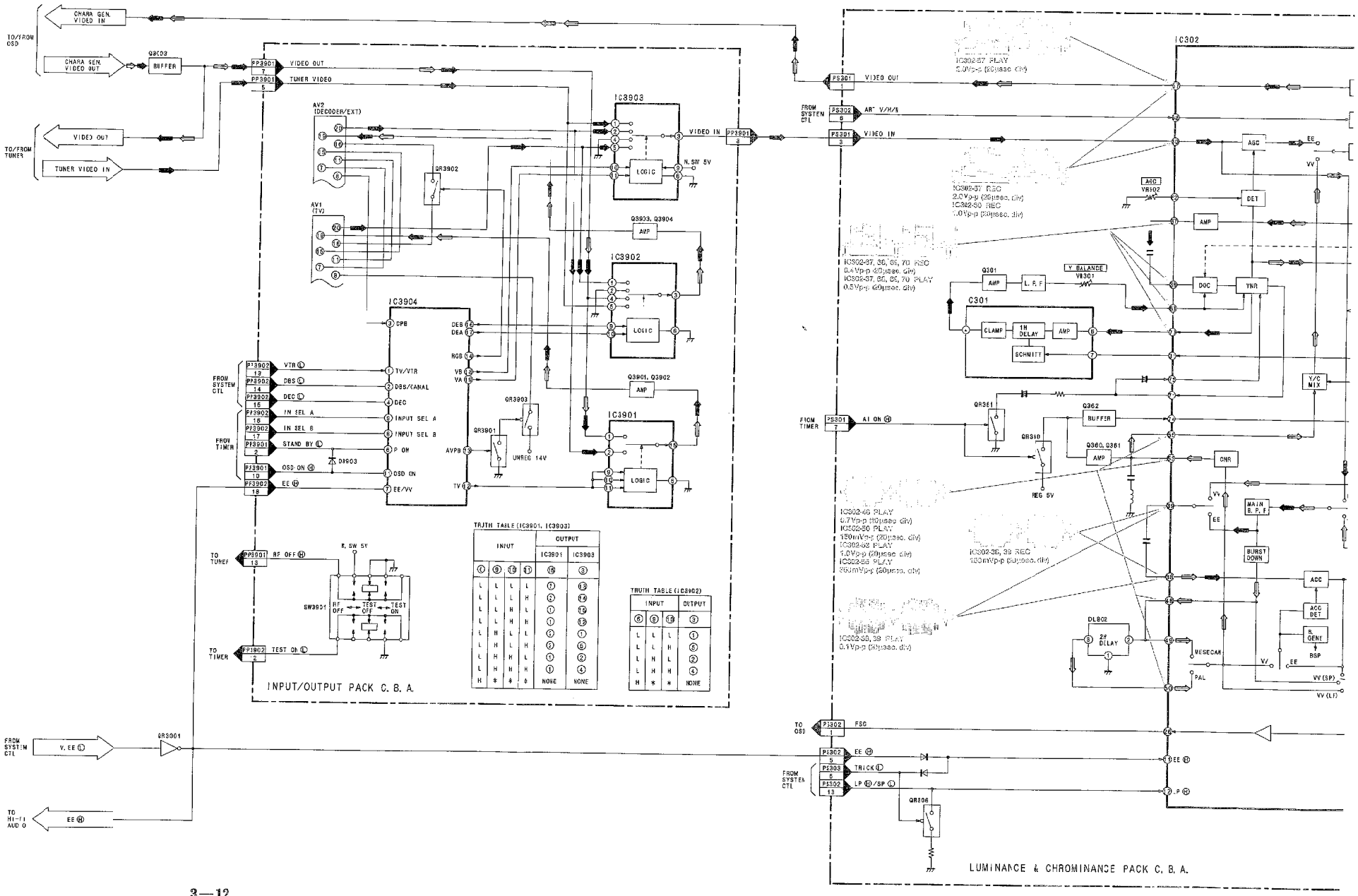


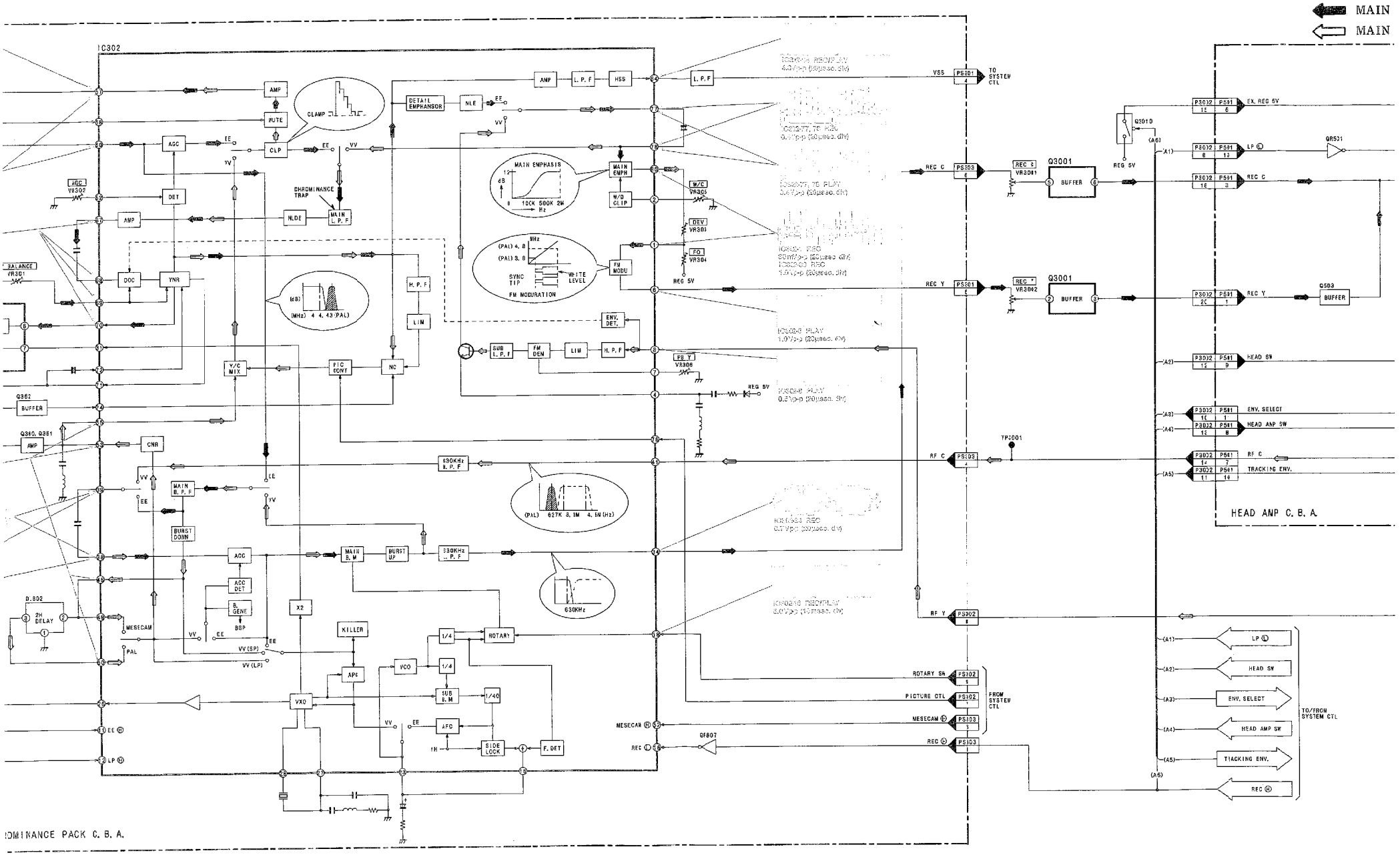
SYMBOL	TRUTH VALUE TABLE
INVERTER	IN (a) H L; OUT (b) L H
COMPARTOR	IN (a)/(b) (a)>(b) (a)<(b); OUT (c) H L
AND CIRCUIT	IN (a) L L H H; (b) L H L H; OUT (c) L L L H
OR CIRCUIT	IN (a) L L H H; (b) L H L H; OUT (c) L H H H
THREE STATES BUFFER	IN (a) H L H or L; (b) L L H; OUT (c) H L ※
TR. SW (NPN TYPE)	BASE H L; TR. SW ON OFF
TR. SW (PNP TYPE)	BASE H L; TR. SW OFF ON
R-S TYPE FLIP-FLOP	IN (a) L L ⊓; (b) L ⊓ L; OUT (c) ※ L H; (d) ◆ H L

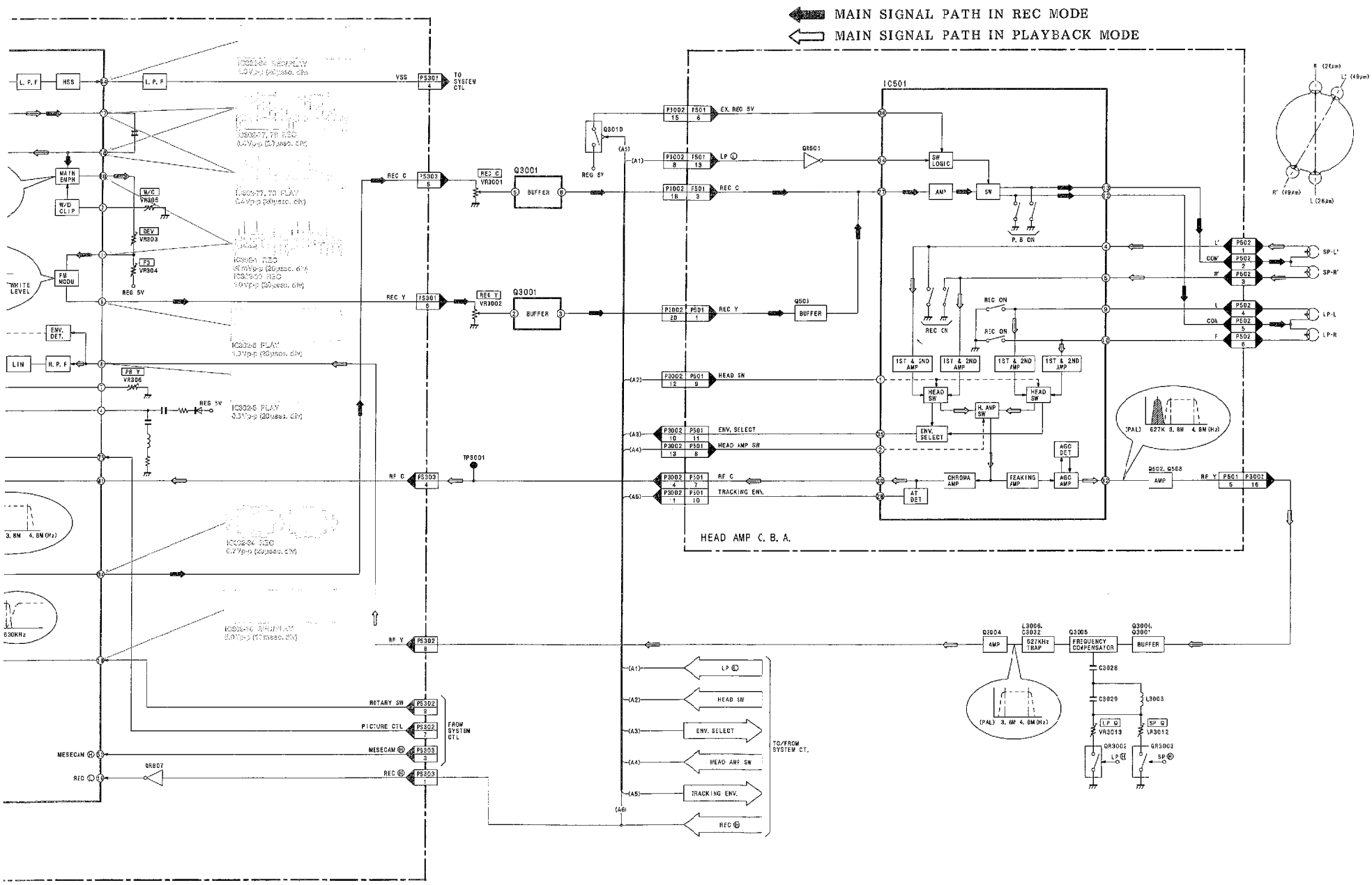
※ High Impedance

※ Initial concition is maintained.
◆ Initial concition is reversed.

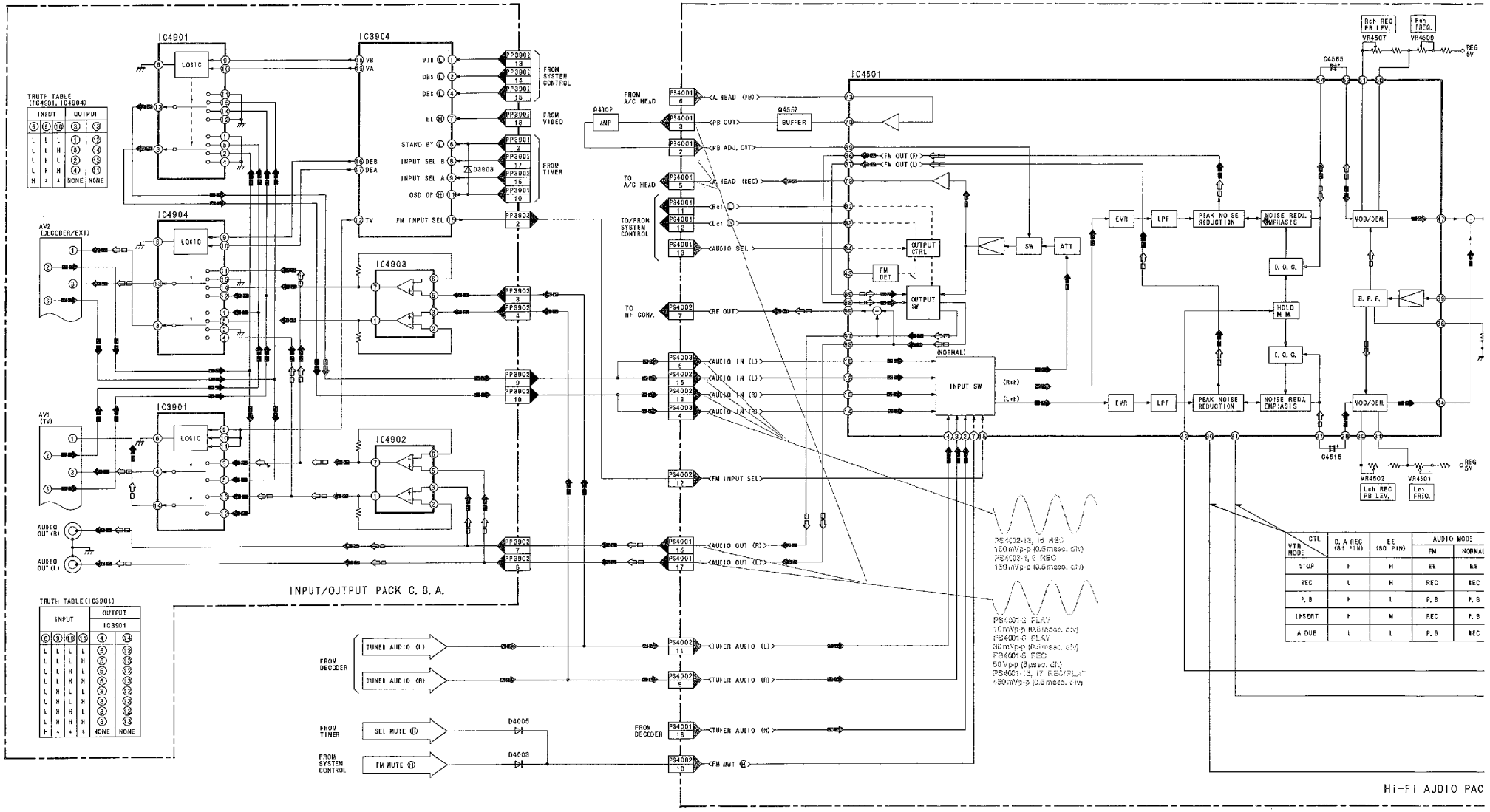
3-3 LUMINANCE & CHROMINANCE BLOCK DIAGRAM

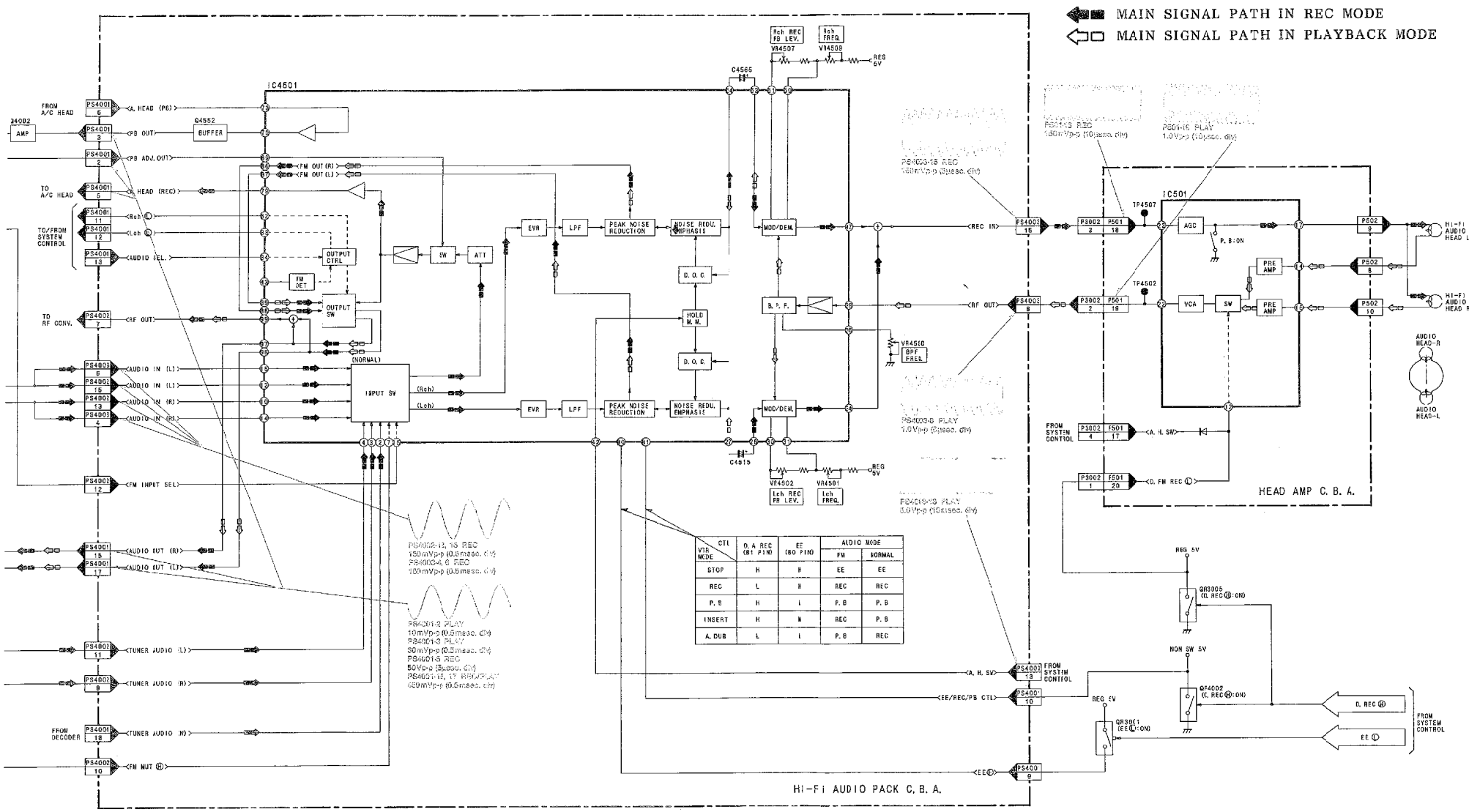



MAIN
MAIN
IC302
AMP
MUTE
CLAMP
AGC
CLP
DET
AGC VR302
CHROMINANCE TRAP
NLDE
MAIN L.P.F
DETAIL EMPHANSOR
NLE
AMP
L.P.F
HSS
L.P.F
MAIN EMPH
W/D CLIP
W/C VR305
DEV VR303
FO VR304
FM MODU
MAIN EMPHASIS
SYNC TIP
WHITE LEVEL
FM MODURATION
BALANCE VR301
DOC
YNR
H.P.F
LIM
ENV. DET.
SUB L.P.F
FM DEM
LIM
H.P.F
FB Y VR306
Y/C MIX
PIC CONT
NC
REG 5V
Q362 BUFFER
Q360, Q361 AMP
CNR
630KHz B.P.F
MAIN B.P.F
BURST DOWN
ACC
ACC DET
B. GENE
BGP
X2
MAIN B.M
BURST UP
630KHz B.P.F
630KHz
D.802 2H DELAY
MESECAM
PAL
VV (SP)
VV (LP)
KILLER
APC
VCO
1/4
ROTARY
1/4
SUB B.M
1/40
VXO
APC
1H
SIDE LOCK
F.DET
EE H
LP H
VSS
PS301
TO SYSTEM CTL
REC C
PS303
REC B VR3041
Q3001 BUFFER
REC Y
PS301
REC Y VR3042
Q3001 BUFFER
RF C
PS303
RF Y
PS302
TP3001
ROTARY SW
PICTURE CTL
MESECAM H
REC H
PS302
PS303
PS303
FROM SYSTEM CTL
QF807
Q3010
REG 5V
P3012 P591 15 6 EX. REG 5V
P3012 P591 8 12 LP Ⓛ
QR521
P3012 P591 16 3 REC C
Q503 BUFFER
P3012 P591 2C 7 REC Y
P3012 P591 12 9 HEAD SW
P3012 P591 10 1 ENV. SELECT
P3012 P591 12 8 HEAD AMP SW
P3012 P591 14 7 RF C
P3012 P591 11 10 TRACKING ENV.
HEAD AMP C. B. A.
(A1) LP Ⓛ
(A2) HEAD SW
(A3) ENV. SELECT
(A4) HEAD AMP SW
(A5) TRACKING ENV.
(A6) REC H
TO/FROM SYSTEM CTL
OMINANCE PACK C. B. A.


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
IC501
HEAD AMP C. B. A.
L. P. F
HSS
MAIN EMPH
W/D CLIP
FM MODU
WHITE LEVEL
ENV. DET.
LIN
H. P. F
REC 5V
VSS
TO SYSTEM CTL
REC C
REC Y
Q3001
BUFFER
Q3010
EX. REC 5V
LP
REC C
REC Y
Q503
SW LOGIC
AMP
SW
P. B ON
REC ON
1ST & 2ND AMP
HEAD SW
H. AMP SW
ENV. SELECT
HEAD SW
TRACKING ENV.
CHROMA AMP
PEAKING AMP
AGC AMP
AGC DET
ATF DET
RF C
RF Y
Q502, Q503
AMP
L'
CON'
R'
L
CON
F
SP-L'
SP-R'
LP-L
LP-R
ROTARY SW
PICTURE CTL
MESECAM
REC
FROM SYSTEM CTL
TO/FROM SYSTEM CT.
Q3004
AMP
L3006, C3032
627KHz TRAP
Q3005
FREQUENCY COMPENSATOR
Q3006, Q3007
BUFFER
C3028
C3029
L3003
LP Q
SP Q
VR3013
VR3012
QR3002
QR3003
QR807

3-4 Hi-Fi AUDIO BLOCK DIAGRAM

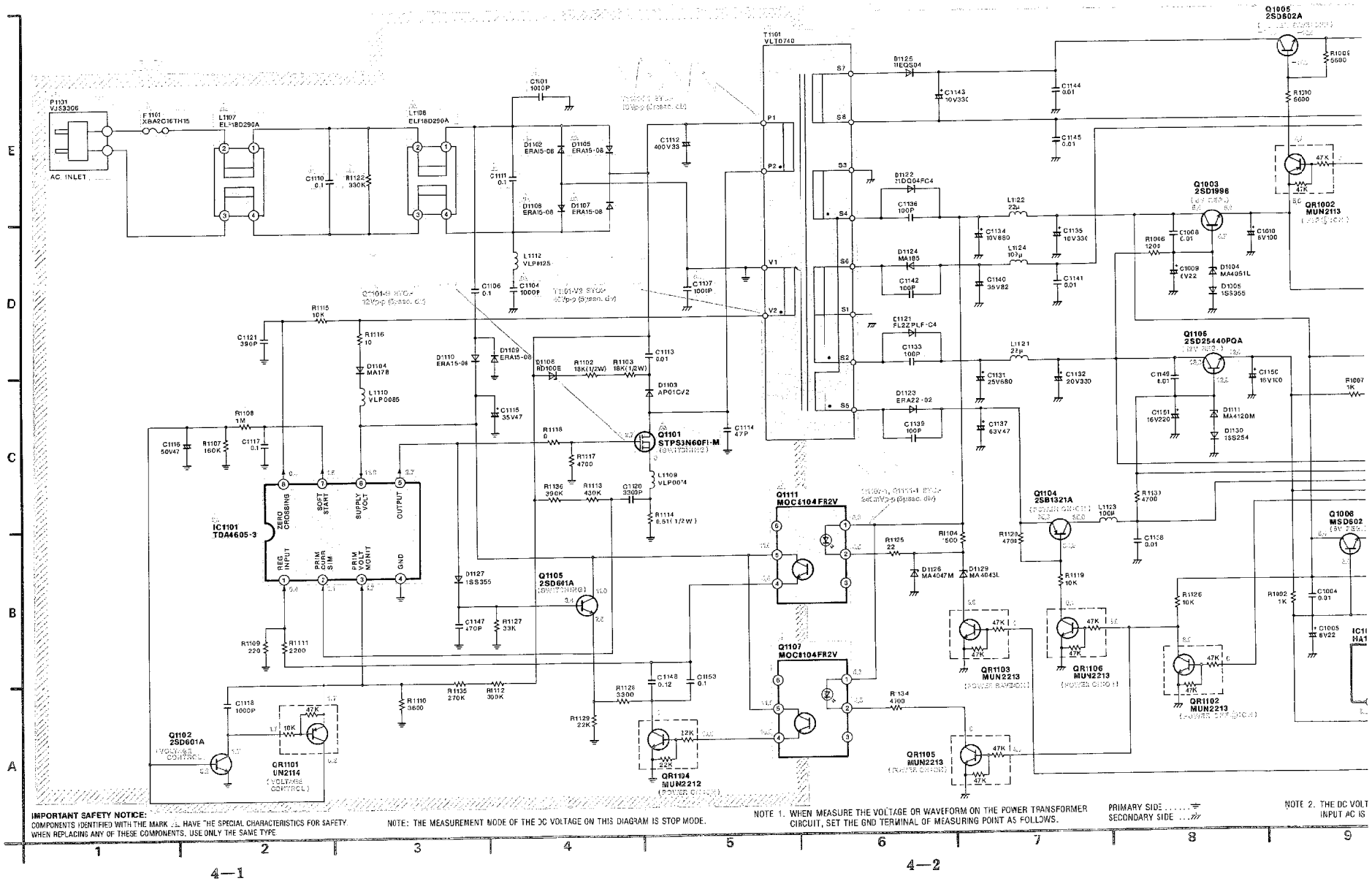




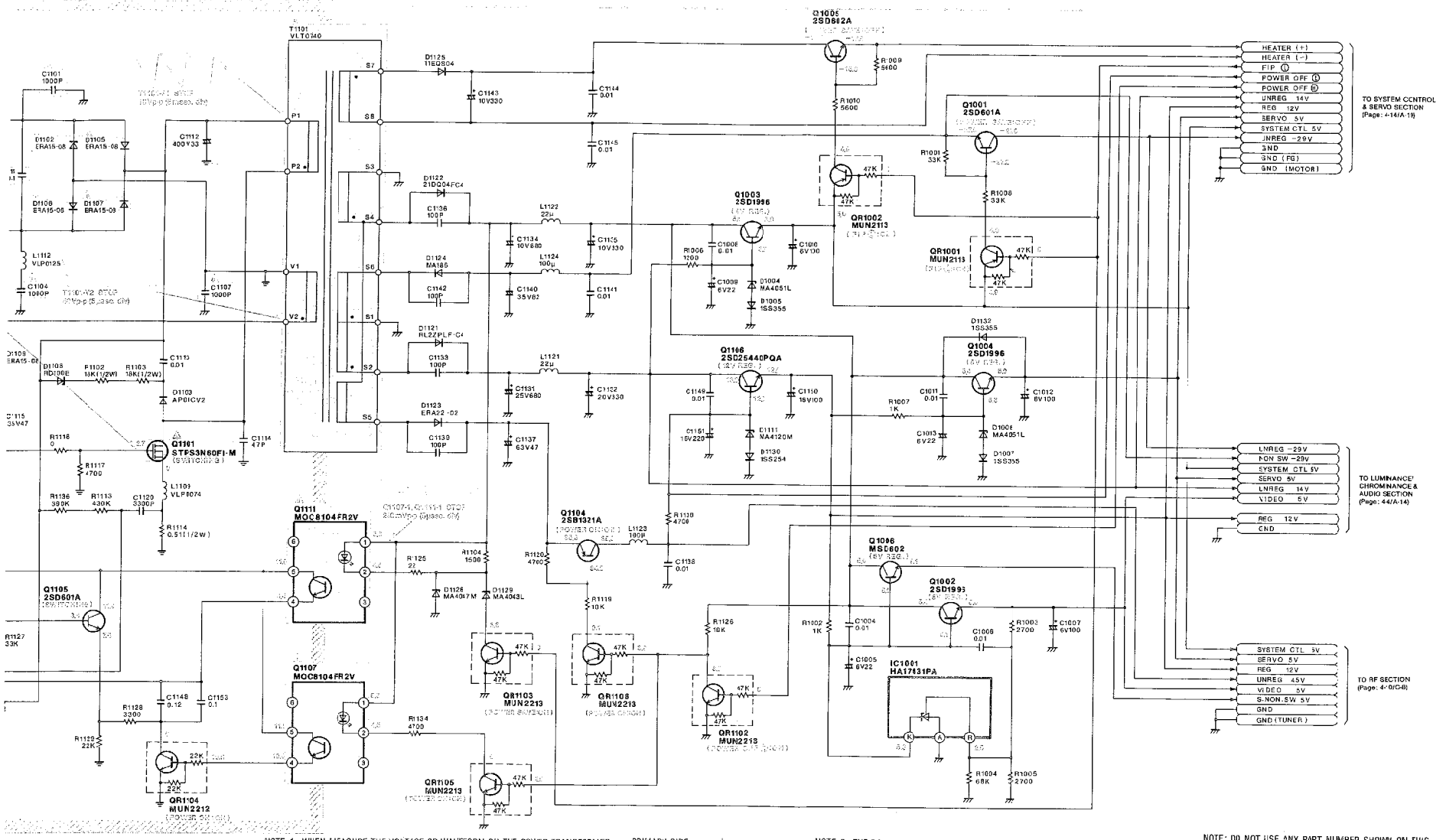
CTL / VTR MODE	D. A REC (81 PIN)	EE (80 PIN)	AUDIO MODE FM	AUDIO MODE NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P. B	H	L	P. B	P. B
INSERT	H	H	REC	P. B
A. DUB	L	L	P. B	REC

SECTION 4
SCHEMATIC DIAGRAMS

4-1 POWER SUPPLY SECTION IN MAIN SCHEMATIC DIAGRAM



C DIAGRAM



E OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.

PRIMARY SIDE ..... ⏚
SECONDARY SIDE ..... ⫽

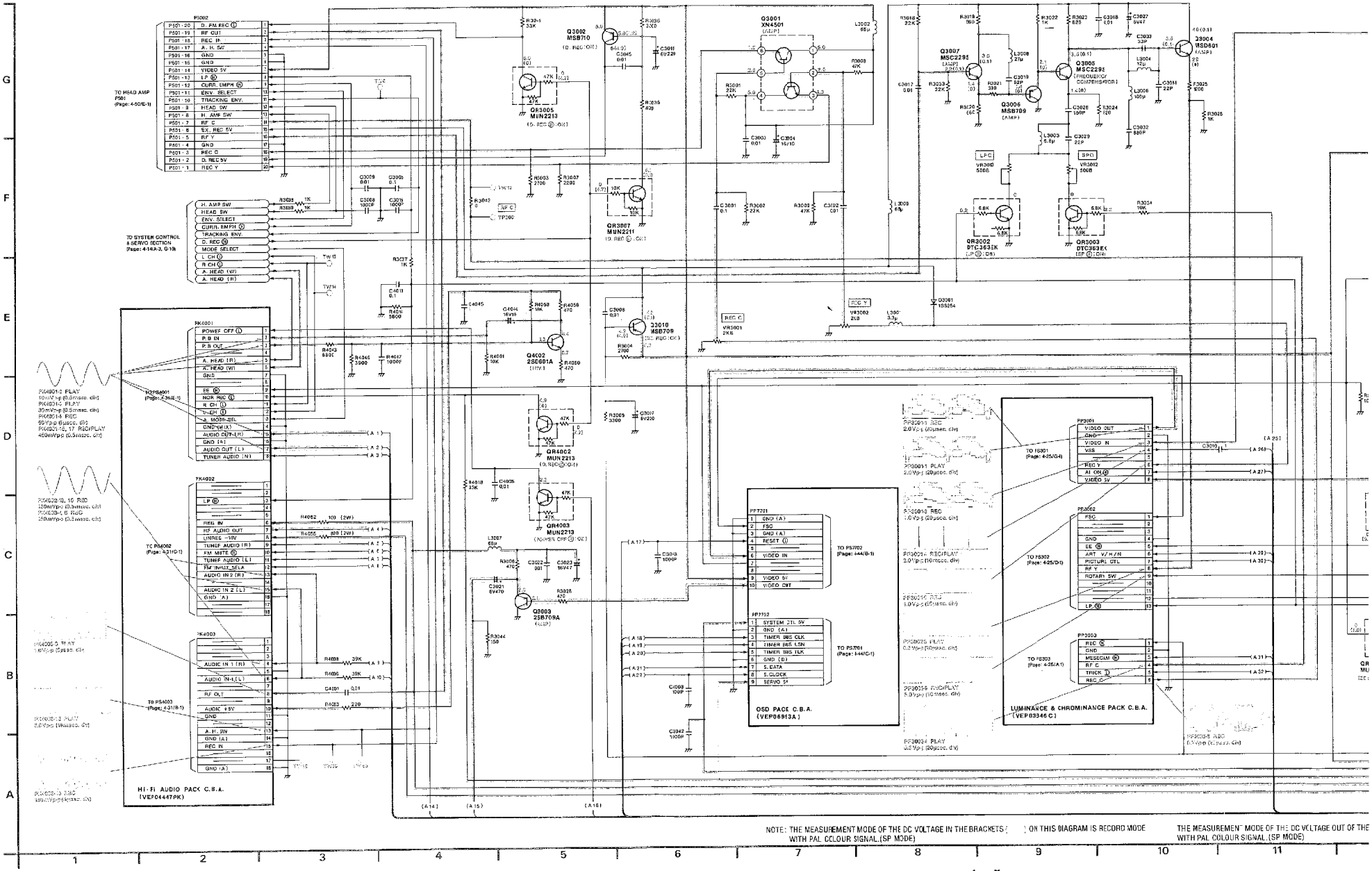
NOTE 2. THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4 5 6 7 8 9 10 11 12

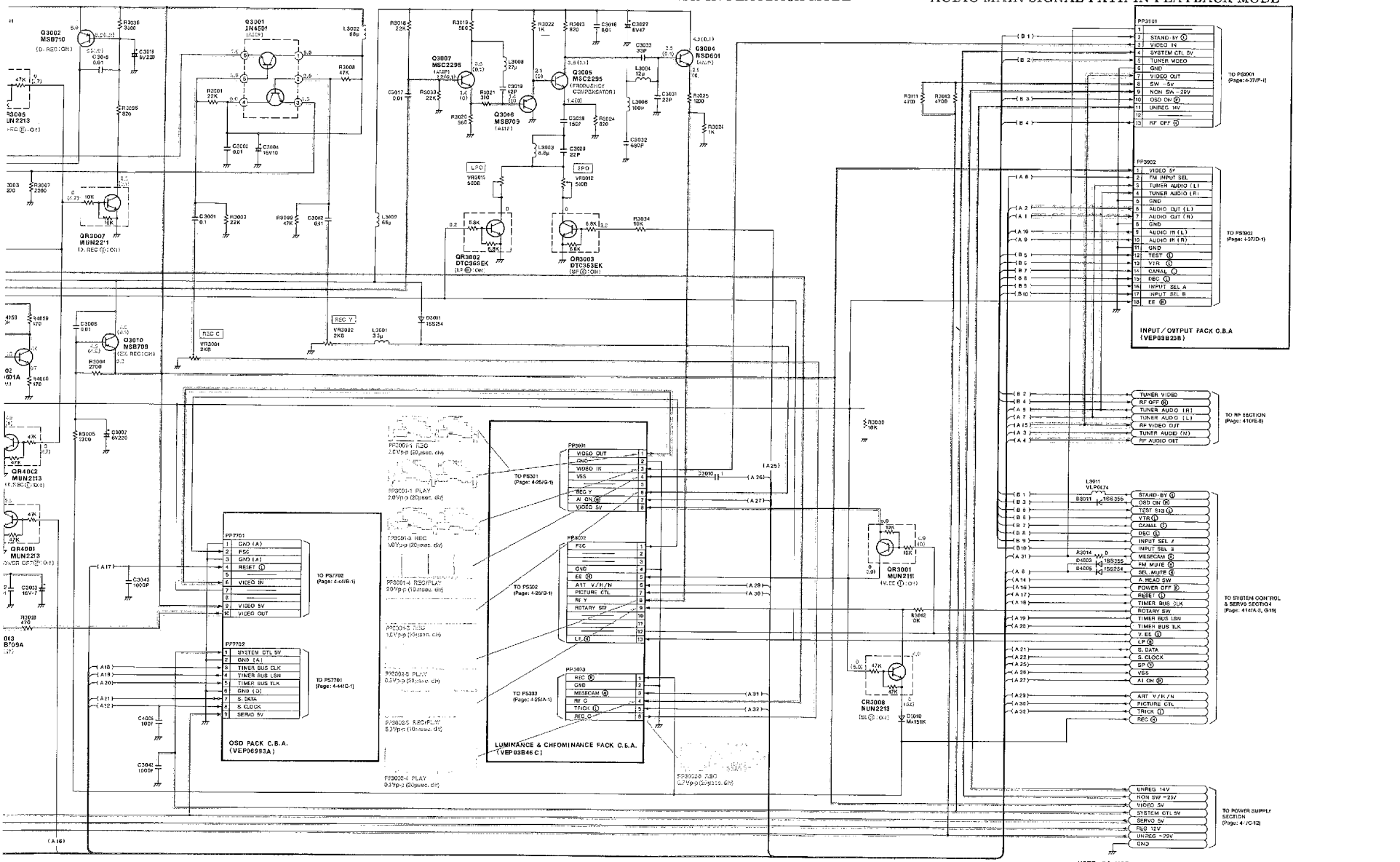
4-2. LUMINANCE/CHROMINANCE & AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE


HI-FI AUDIO PACK C.B.A. (VEP04447PK)
OSD PACK C.B.A. (VEP06963A)
LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03546C)
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE
WITH PAL COLOUR SIGNAL.(SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE
WITH PAL COLOUR SIGNAL.(SP MODE)

MAIN SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

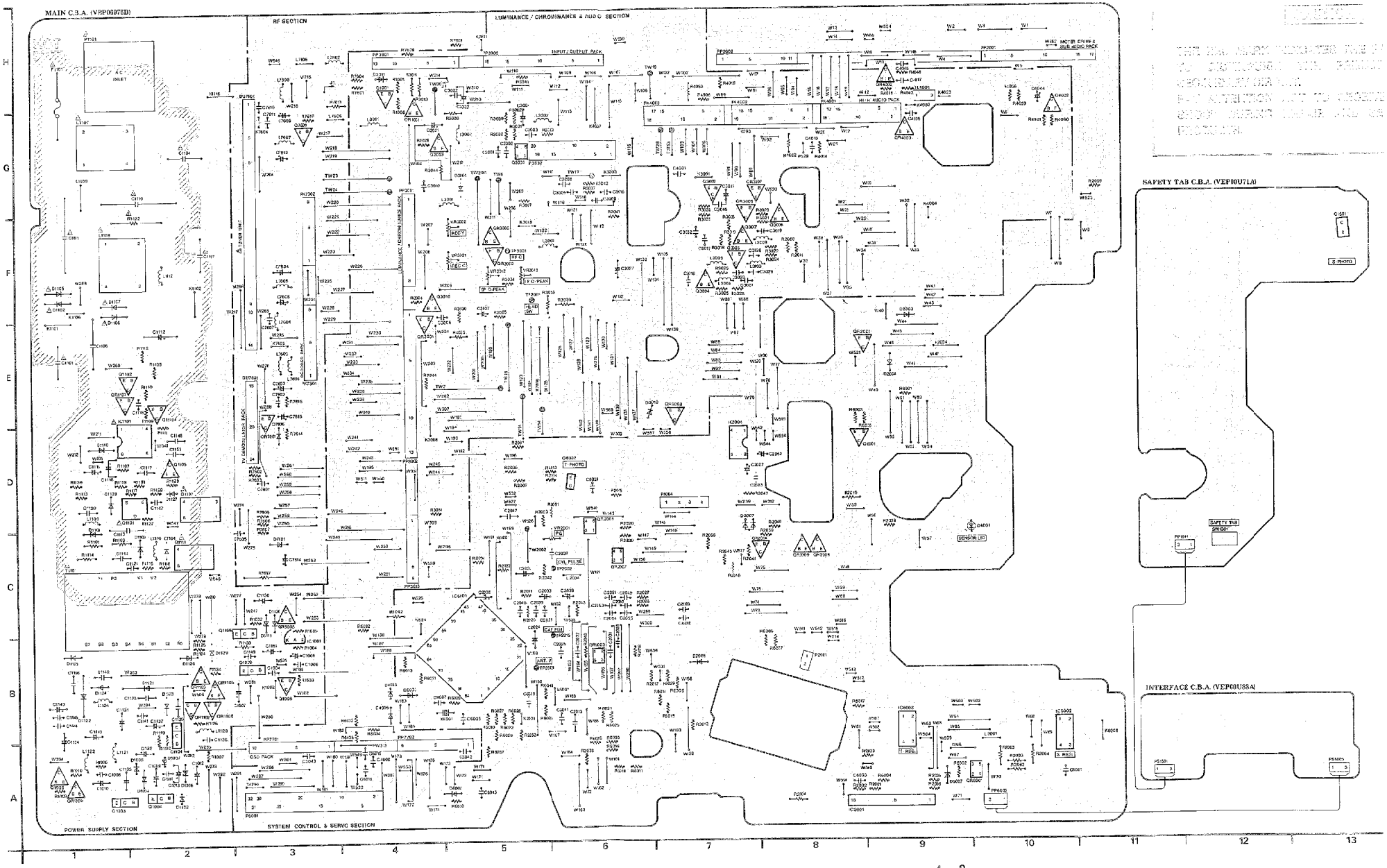


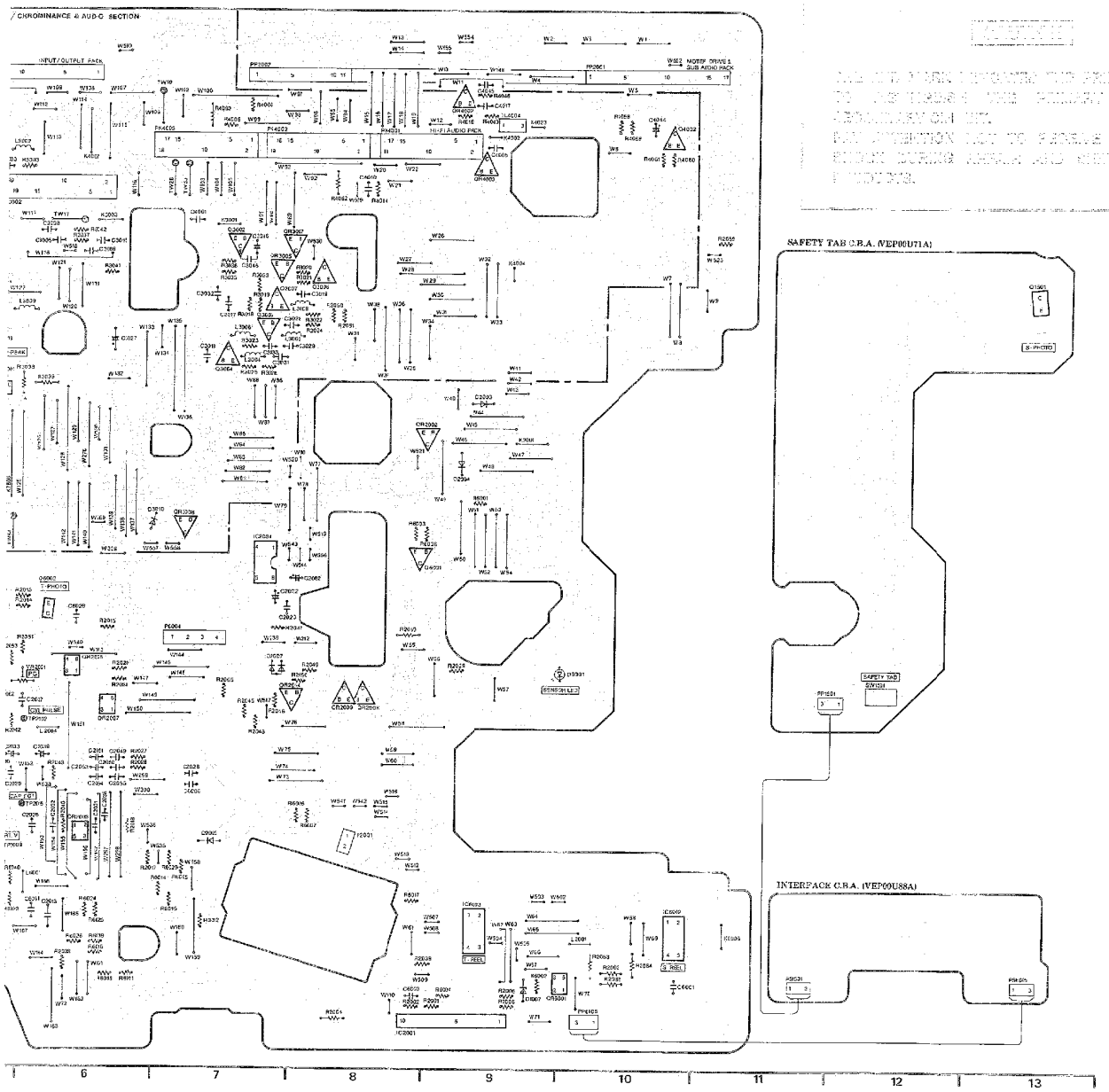
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-3 MAIN C.B.A. (VEP06976B)





MAIN C.B A. ADDRESS INFORMATION

SYSTEM CONTROL & SERVO SECTION	
Transistor	
Q1501	F-13
Q6001	D-9
Q6002	D-6
Transistor & Resistor	
QR2002	E-9
QR2003	B-6
QR2006	D-6
QR2007	C-6
QR2008	C-8
QR2009	C-8
QR2014	C-8
QR6001	A-10
QR6003	C-3
Integrated Circuit	
IC2001	A-8
IC2004	D-7
IC5001	C-5
IC5002	B-10
IC5003	B-9
Test Point	
TP2001	F-5
TP2002	C-6
TP2009	B-5
TP2015	B-6
TW7	E-4
TW54	D-5
TW2002	C-5
Adjustment	
VR2001	C-6
Connector	
P2001	B-8
P6001	A-3
P6004	D-7
PP1501	C-11
PP2001	H-10
PP2002	H-7
PP6005	A-10
PS1501	A-11
PS6005	A-13

ADDRESS INFORMATION

LUMINANCE/ CHROMINANCE & AUDIO SECTION	
Transistor	
Q3001	G-5
Q3002	G-7
Q3003	G-4
Q3004	F-7
Q3005	F-7
Q3006	F-8
Q3007	F-7
Q3010	F-5
Q4002	H-10
Transistor & Resistor	
QR3001	E-4
QR3002	F-5
QR3003	F-5
QR3005	G-7
QR3006	G-6
QR3007	E-7
QR4002	H-5
QR4003	G-5
Test Point	
TL4004	H-9
TP3001	F-5
TW5	G-5
TW14	D-5
TW15	E-5
TW17	G-6
TW19	H-7
TW28	G-7
TW53	G-7
TW200	G-5
Adjustment	
VR3001	F-5
VR3002	F-5
VR3012	F-5
VR3013	F-5
Connector	
P3002	G-5
PP3001	G-4
PP3002	D-4
PP3003	C-4
PP3901	H-4
PP3902	H-5
PP7701	B-3
PP7702	B-4
PK4001	H-8
PK4002	H-7
PK4003	H-7

ADDRESS INFORMATION

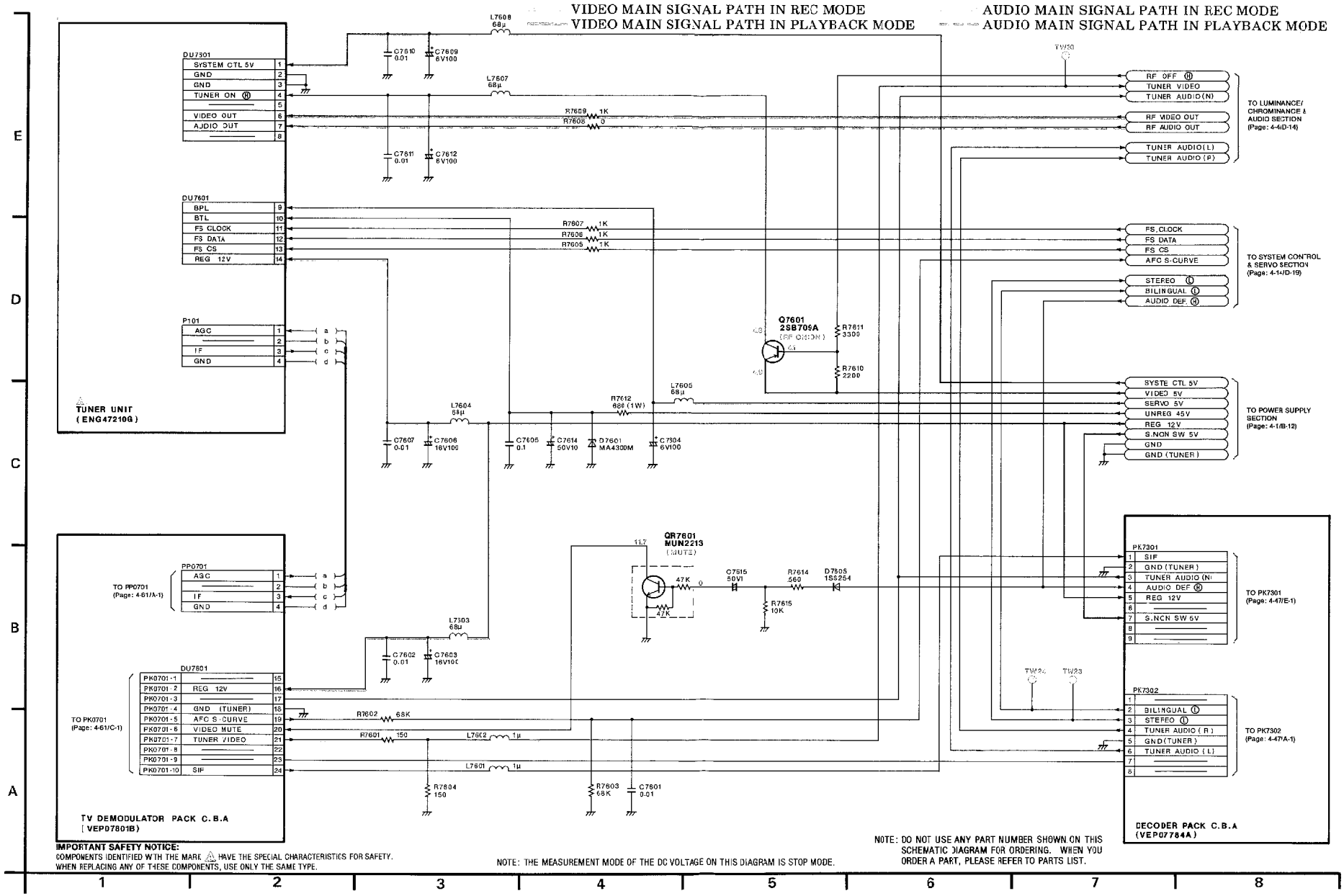
POWER SUPPLY SECTION	
Transistor	
Q1001	H-4
Q1002	B-3
Q1003	A-1
Q1004	A-2
Q1005	A-1
Q1006	B-3
Q1101	D-2
Q1102	E-2
Q1104	A-2
Q1105	D-2
Q1106	C-2
Q1107	D-2
Q1111	C-2
Transistor & Resistor	
QR1001	G-4
QR1002	A-1
QR1101	E-1
QR1102	A-1
QR1103	B-2
QR1104	E-2
QR1105	B-2
QR1106	B-2
Integrated Circuit	
IC1001	B-3
IC1101	E-1

ADDRESS INFORMATION

RF SECTION	
Transistor	
Q7601	G-3
Transistor & Resistor	
QR7601	D-3
Test Point	
TW23	G-4
TW24	G-4
TW30	H-4
Connector	
DU7601	H-3
DU7601	E-3
PK7301	E-3
PK7302	G-3

ADDRESS INFORMATION

4-4. RF SECTION IN MAIN SCHEMATIC DIAGRAM



SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2001										IC2004							
MODE	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8
STOP	0.1	13.8	13.8	0	0	0	7.2	9.0	0.1	0	2.5	2.5	2.5	0	2.7	2.7	3.7	13.2
PLAY	0.1	13.7	13.7	0	0	0	7.3	8.9	0.2	0	2.5	2.5	2.5	0	2.7	2.7	2.2	13.1
REC	0.1	13.7	13.7	0	0	0	7.3	8.9	0.1	0	2.5	2.5	2.5	0	2.7	2.7	4.6	13.0
F.F	0.1	13.6	13.6	0	0	0	13.6	8.9	0.1	0	2.5	2.5	2.5	0	2.7	2.7	3.3	13.0
REW	0.1	13.6	13.6	0	0	0	13.6	8.9	0.1	0	2.5	2.5	2.5	0	2.7	2.7	4.0	13.0

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	4.9	0	0	4.9	4.9	0	0	4.7	5.0	5.0	0	0.1	0	0	2.5	4.9	4.7	0.1	0
PLAY	0	4.7	0	0	4.9	4.9	0	0	4.7	4.9	4.9	0	0.1	0	0	2.5	4.9	4.9	4.9	0
REC	0	4.9	0	0	4.9	4.9	0	0	0	4.9	4.9	0	0.1	0	0	2.5	4.9	4.9	4.9	0
F.F	0	4.9	4.9	0	3.3	4.9	0	0	3.2	4.9	4.9	0	0.1	0	0	2.5	4.9	4.6	2.5	0
REW	0	4.9	4.9	0	2.8	4.9	0	0	2.9	4.9	4.9	0	0.1	0	0	2.5	4.9	4.9	2.6	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	4.9	5.0	0.2	2.4	1.4	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.4
PLAY	4.9	4.9	2.5	2.4	3.2	2.5	2.5	2.5	0	2.5	2.6	2.5	4.9	0	0	0	2.5	2.5	0	2.7
REC	4.9	4.9	2.5	2.4	0.8	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	3.3	3.5	0	2.5	2.5	0	2.4
F.F	4.9	4.9	1.9	2.4	1.4	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.8
REW	4.9	4.9	2.0	2.4	2.7	2.5	2.5	2.5	0	2.5	2.4	2.6	4.9	0	0	0	2.5	2.5	0	2.4

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.4	5.0	1.3	3.5	0	4.7	0	0	4.9	0	4.7	4.9	4.9	4.9	4.9	4.9	0	0	0	4.9
PLAY	2.5	4.9	1.2	3.2	3.7	4.7	0	0	4.9	0	4.7	4.9	4.9	0.1	4.9	4.9	0	0	0	4.9
REC	2.5	4.9	1.4	3.6	0	4.9	0	0	4.9	0	4.7	4.9	4.9	0.1	4.9	4.9	0	0	0	4.9
F.F	2.4	4.9	1.4	3.5	0	4.9	0	0	4.9	0	4.7	4.9	4.9	0.1	0	4.9	0	0	0	4.9
REW	2.4	4.9	1.4	3.5	0	4.9	0	0	4.9	0	4.7	4.9	4.9	0.1	0	4.9	0	0	0	4.9

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	4.9	2.0	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	4.9	4.9	0	0	4.7	0	0	4.9	0
PLAY	4.9	0	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	0	0	0	0	4.7	0	4.9	4.9	0
REC	4.9	0	3.2	4.2	4.9	4.3	4.9	4.9	4.9	4.9	0	0	4.9	0	0	4.7	0	0	4.9	0
F.F	4.9	0	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	0	4.9	0	0	0	0	0	4.9	0
REW	4.9	4.9	3.2	4.2	4.9	0	0	4.9	0.1	4.9	0	4.9	4.9	0	0	0	0	0	4.9	0

REF. NO.	IC6001																			
MODE	81	82	83	84																
STOP	0	2.3	–	4.9																
PLAY	0	2.3	–	4.9																
REC	0	2.3	–	4.9																
F.F	0	2.3	–	4.9																
REW	0	2.3		4.9																

REF. NO.	IC6002										IC6003									
MODE	1	2	3	4							1	2	3	4						
STOP	1.2	0	4.9	0							2.3	1.2	0.1	0						
PLAY	1.2	0	4.9	0							2.3	1.2	4.9	0						
REC	1.2	0	4.9	0							2.3	1.2	4.9	0						
F.F	1.2	0	4.0	0							2.3	1.2	2.6	0						
REW	1.2	0	4.9	0							2.3	1.2	2.6	0						

SYSTEM CONRTROL & SERVO TRANSISTORs DC VOLTAGE CHART (SP MODE)

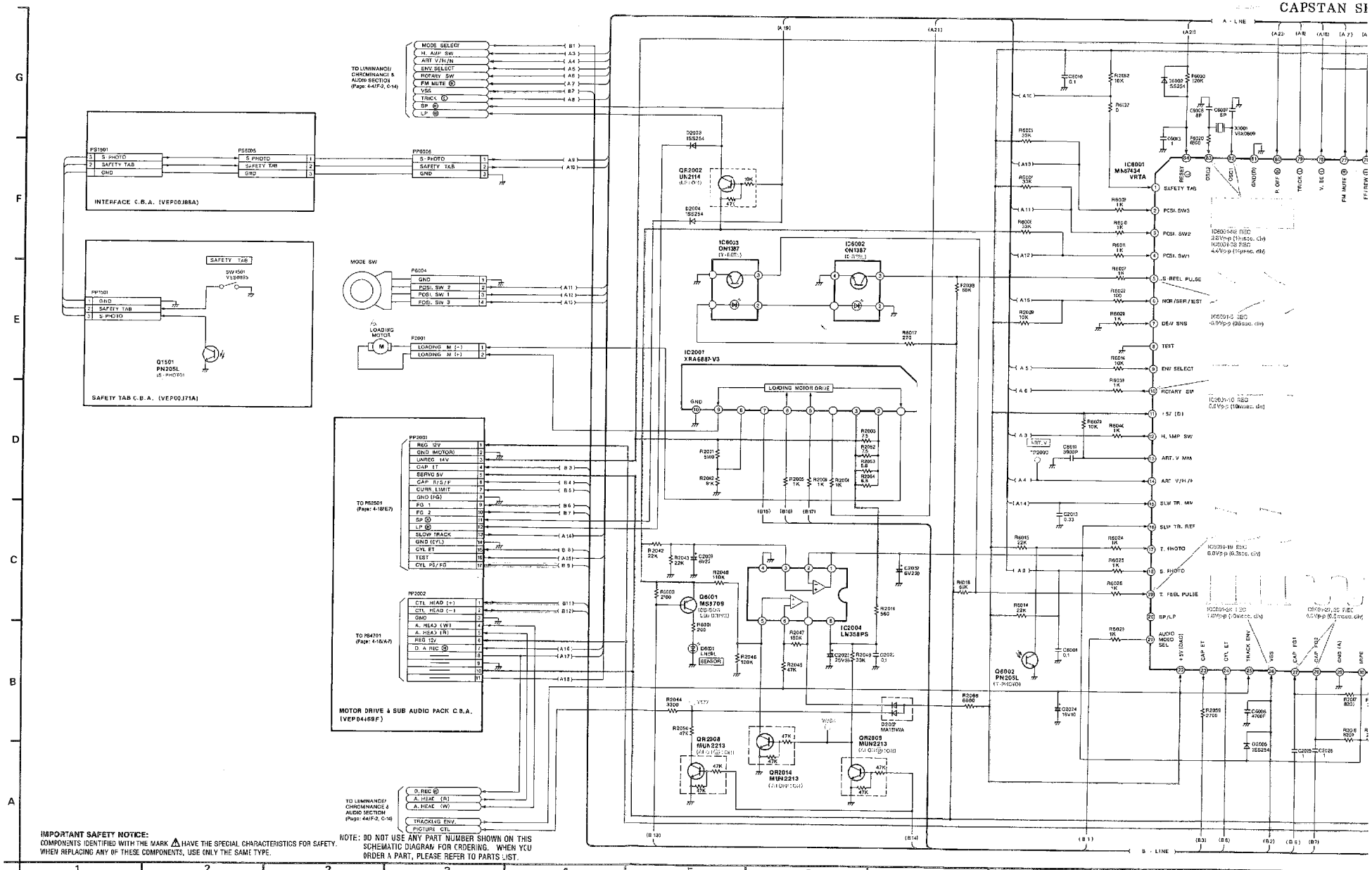
REF. NO.	Q1501			Q3001			Q6002											
MODE	E	C		E	C	B	E	C										
STOP	0	4.7		5.0	−0.4	5.0	0	4.9										
PLAY	0	4.9		4.9	4.9	4.2	0	4.9										
REC	0	4.9		4.9	4.9	4.2	0	4.9										
F.F	0	4.6		4.9	4.9	4.2	0	4.9										
REW	0	4.9		4.9	4.9	4.2	0	4.9										

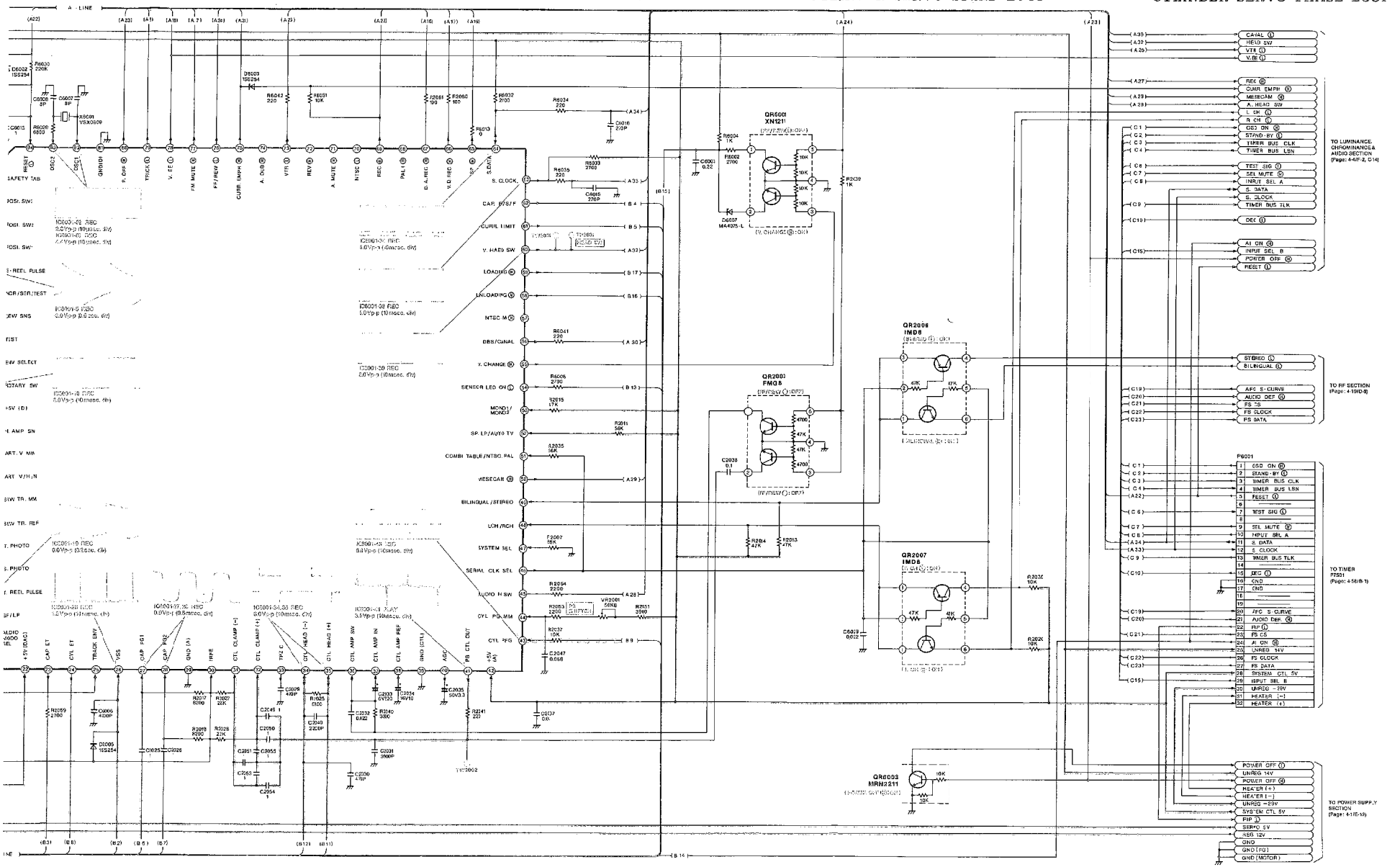
REF. NO.	QR2002			QR2003						QR2006								
MODE	E	C	B	1	2	3	4	5		1	2	3	4	5	6			
STOP	5.0	0.2	4.9	0	0	3.6	0	3.6		4.9	4.7	0	5.1	4.9	5.0			
PLAY	4.9	0.2	4.9	0	0	3.6	0	3.6		4.9	4.7	4.9	5.1	4.9	5.0			
REC	4.9	0.2	4.9	0	0	3.6	0	3.6		4.9	4.7	4.9	5.1	4.9	5.0			
F.F	4.9	0.2	4.9	0	0.8	0	0	0		4.9	4.7	4.9	5.1	4.9	5.0			
REW	4.9	0.2	4.9	0	0.8	0	0	0		4.9	4.9	4.9	5.1	4.9	5.0			

REF. NO.	QR2007						QR2008			QR2009			QR2014					
MODE	1	2	3	4	5	6	E	C	B	E	C	B	E	C	B			
STOP	0	0	0	0	4.7	0	0	0	4.2	0	C	4.2	0	2.7	0			
PLAY	0	4.7	0	0	4.7	0	0	0	4.2	0	C	4.2	0	2.7	0			
REC	0	4.7	0	0	4.7	0	0	0	4.2	0	C	4.2	0	2.7	0			
F.F	0	0	0	0	4.7	0	0	0	4.2	0	C	4.2	0	2.7	0			
REW	0	4.9	0	0	4.9	0	0	0	4.2	0	C	4.2	0	2.7	0			

REF. NO.	QR6001						QR6003											
MODE	1	2	3	4	5		E	C	B									
STOP	0	0	4.9	0	4.7		0	12.9	0									
PLAY	0	0	4.9	0	4.7		0	12.9	0									
REC	0	0	4.9	0	4.7		0	12.9	0									
F.F	13.6	7.3	0	0	0		0	12.9	0									
REW	13.6	7.4	0	0	0		0	12.9	0									

4-5 SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM


CAPSTAN SI
A - LINE
B - LINE
INTERFACE C.B.A. (VEP00J88A)
SAFETY TAB C.B.A. (VEP00J71A)
MOTOR DRIVE & SUB AUDIO PACK C.B.A. (VEP04468F)
IC6001 MN67434 VRTA
IC6003 ON1387
IC6002 ON1387
IC2007 XRA6887-V3
IC2004 LN358PS
QR2002 UN2114
QR2008 MUN2213
QR2003 MUN2213
QR2014 MUN2213
Q6001 MS3709
Q6002 PN205L
Q1501 PN205L
LOADING MOTOR DRIVE
MODE SW
TO LUMINANCE/ CHROMINANCE & AUDIO SECTION (Page: 4-4/F-2, G-14)
TO PS2501 (Page: 4-18/E7)
TO P64701 (Page: 4-18/A-7)
TO LUMINANCE/ CHROMINANCE & AUDIO SECTION (Page: 44/F-2, G-14)
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
A - LINE
SAFETY TAB
POSI. SW1
POSI. SW2
POSI. SW3
S-REEL PULSE
MOR/SER/TEST
DEW SNS
FIST
SW SELECT
ROTARY SW
+5V (D)
H. AMP SW
ART. V MM
ART. V/H IN
SW TR. MM
SW TR. REF
T. PHOTO
S. PHOTO
T. REEL PULSE
SP/LP
AUDIO MODE SEL
S. CLOCK
CAR. BYS/F
CURR LIMIT
V. HAED SW
LOADING
UNLOADING
NTSC M
DBS/CINAL
V. CHANGE
SENSOR LED ON
MOND1/MOND2
SP LP/AUTO TV
COMBI TABLE/NTSC PAL
MESECAM
BILINGUAL/STEREO
LCH/RCH
SYSTEM SEL
SERIAL CLK SEL
AUDIO H SW
CYL PG MM
CYL PG
CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP
TO LUMINANCE, CHROMINANCE & AUDIO SECTION (Page: 4-4/F-2, C-14)
TO RF SECTION (Page: 4-10/D-8)
TO TIMER P.S.U. (Page: 4-5/B-1)
TO POWER SUPPLY SECTION (Page: 4-11/E-12)
9
10
11
12
13
14
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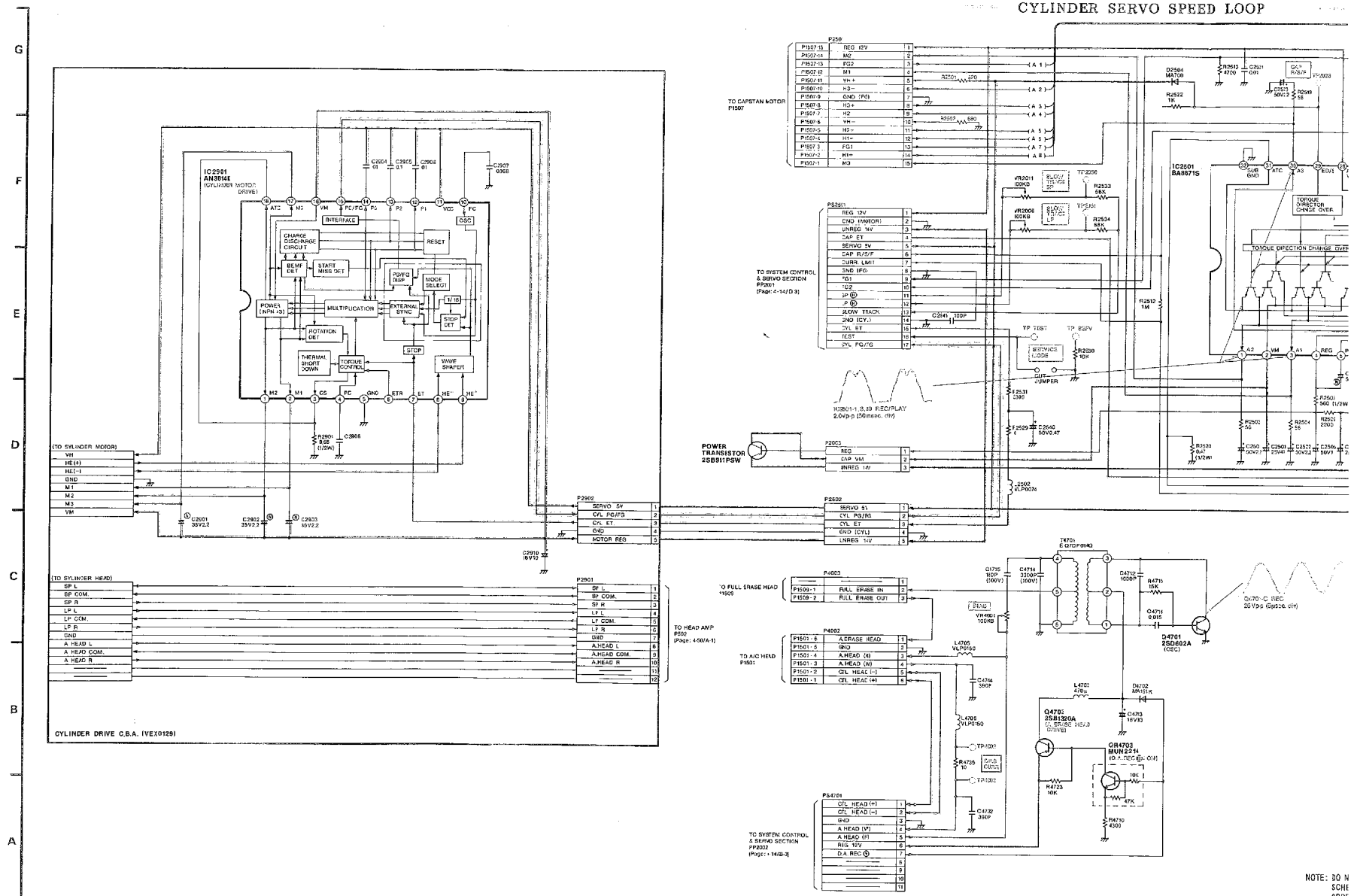
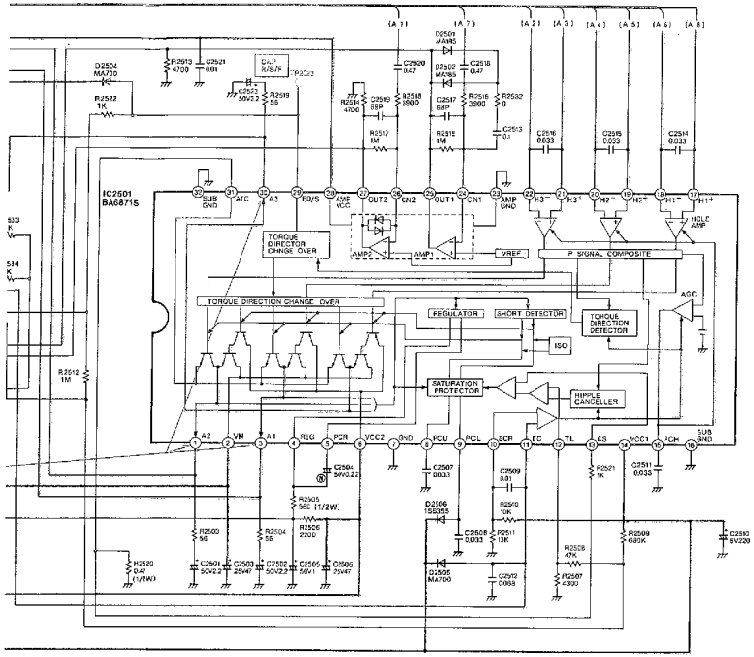
16
17
18
19
20
4—16
4—17

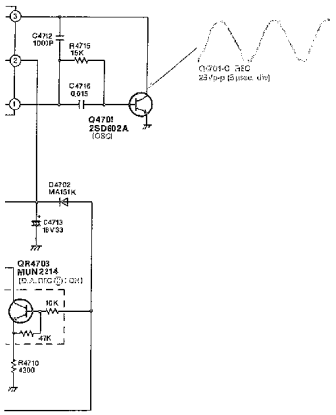
4-6 MOTOR DRIVE & SUB AUDIO PACK SCHEMATIC DIAGRAM



SERVO SPEED LOOP　　CAPSTAN SERVO PHASE LOOP

SERVO SPEED LOOP　　CYLINDER SERVO PHASE LOOP





NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

9　10　11　12　13

MOTOR DRIVE & SUB AUDIO PACK ICs DC VOLTAGE CHART (SP MODE)

REF. NO.	IC2501																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.6	4.4	0.6	13.2	0.1	13.9	0	4.5	0.7	2.8	0.2	0.4	0	4.9	1.5	0	2.3	2.3	2.3	2.2
PLAY	2.6	4.3	2.6	12.4	1.9	13.6	0	0.7	0.7	2.8	2.5	0.4	0.1	4.9	1.5	0	2.3	2.3	2.3	2.3
REC	2.7	4.3	2.7	12.4	2.0	13.6	0	0.7	0.7	2.8	2.5	0.4	0.1	5.0	1.5	0	2.3	2.3	2.3	2.3
F.F	7.5	13.4	7.5	4.3	11.6	13.5	0.1	0.8	0.8	2.8	2.0	0.5	0.2	4.9	1.5	0	2.3	2.3	2.3	2.3
REW	7.0	13.5	7.0	6.9	11.7	13.6	0	0.7	0.8	2.8	2.3	0.5	0.1	4.9	1.5	0	2.3	2.3	2.3	2.3

REF. NO.	IC2501										
MODE	21	22	23	24	25	26	27	28	29	30	31	32
STOP	2.2	2.3	0	6.3	6.3	6.3	6.3	12.3	2.0	0.6	0	0
PLAY	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	2.6	0	0
REC	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	2.6	0.1	0
F.F	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	0	7.5	0.2	0
REW	2.3	2.3	0	6.3	6.3	6.3	6.3	12.3	4.9	7.4	0.2	0

REF. NO.	IC2901																	
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
STOP	13.1	13.1	0.1	0.6	0	2.5	2.4	2.6	2.5	2.6	4.9	3.7	3.6	3.7	1.3	13.8	13.3	0.1
PLAY	13.8	12.8	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.7	3.7	3.7	1.4	13.6	13.7	0.2
REC	13.7	13.7	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.8	3.7	3.7	1.5	13.6	13.7	0.2
F.F	13.8	13.6	0.1	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.8	3.7	3.7	1.5	13.5	13.7	0.1
REW	13.8	13.8	0.2	0.6	0	2.5	2.4	2.6	2.5	2.7	4.9	3.7	3.7	3.7	1.5	13.5	13.7	0.2

MOTOR DRIVE & SUB AUDIO PACK PINs DC VOLTAGE CHART (SP MODE)

REF. NO.	PS2301																
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STOP	12.3	0	13.8	0.2	4.9	2.0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	5.0	1.4
PLAY	12.3	0	13.6	2.5	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4
REC	12.3	0	13.6	2.5	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4
F.F	12.3	0	13.5	2.1	4.9	0	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4
REW	12.3	0	13.5	2.1	4.9	4.9	4.9	0	6.3	6.3	4.4	0	0	0	2.4	4.9	1.4

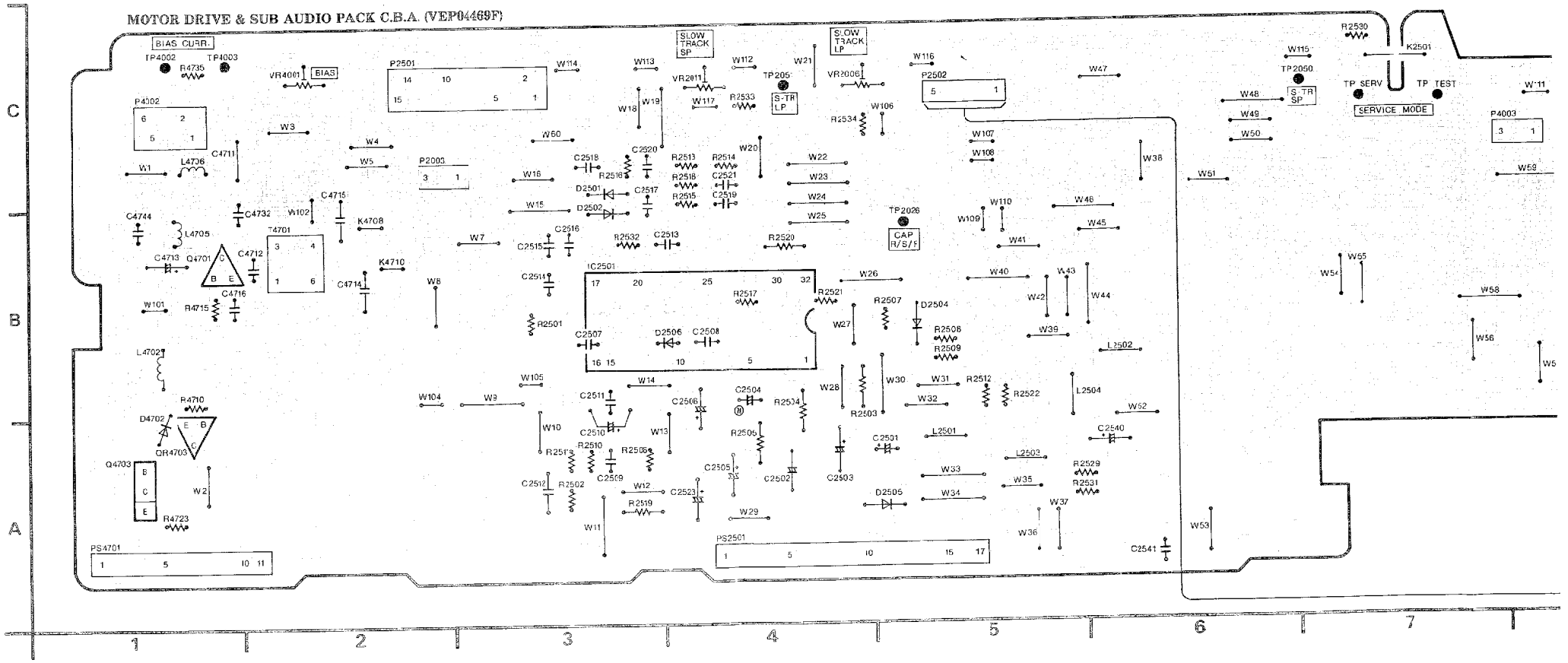
REF. NO.	PS4701										
MODE	1	2	3	4	5	6	7	8	9	10	11
STOP	0	0	0	0	0	12.3	0	0	0	4.9	0
PLAY	0	0	0	0	0	12.3	0	0	0	0	4.9
REC	3.5	3.5	0	0	0	12.3	4.9	4.7	0	4.9	0
F.F	0	0	0	0	0	12.3	0	0	0	4.9	0
REW	0	0	0	0	0	12.3	0	0	0	4.9	0

MOTOR DRIVE & SUB AUDIO PACK TRANSISTORs DC VOLTAGE CHART (SP MODE)

REF. NO.	Q4701			Q4703		
MODE	E	C	B	E	C	B
STOP	0	0.2	0.2	12.3	0.3	12.3
PLAY	0	0.3	0.3	12.3	0.3	12.3
REC	0	11.3	−1.4	12.3	11.9	11.9
F.F	0	0.3	0.3	12.3	0.3	12.3
REW	0	0.3	0.3	12.3	0.3	12.3

REF. NO.	QF4703		
MODE	E	C	B
STOP	0	12.3	0
PLAY	0	12.3	0
REC	4.1	11.5	4.9
F.F	0	12.3	0
REW	0	12.3	0

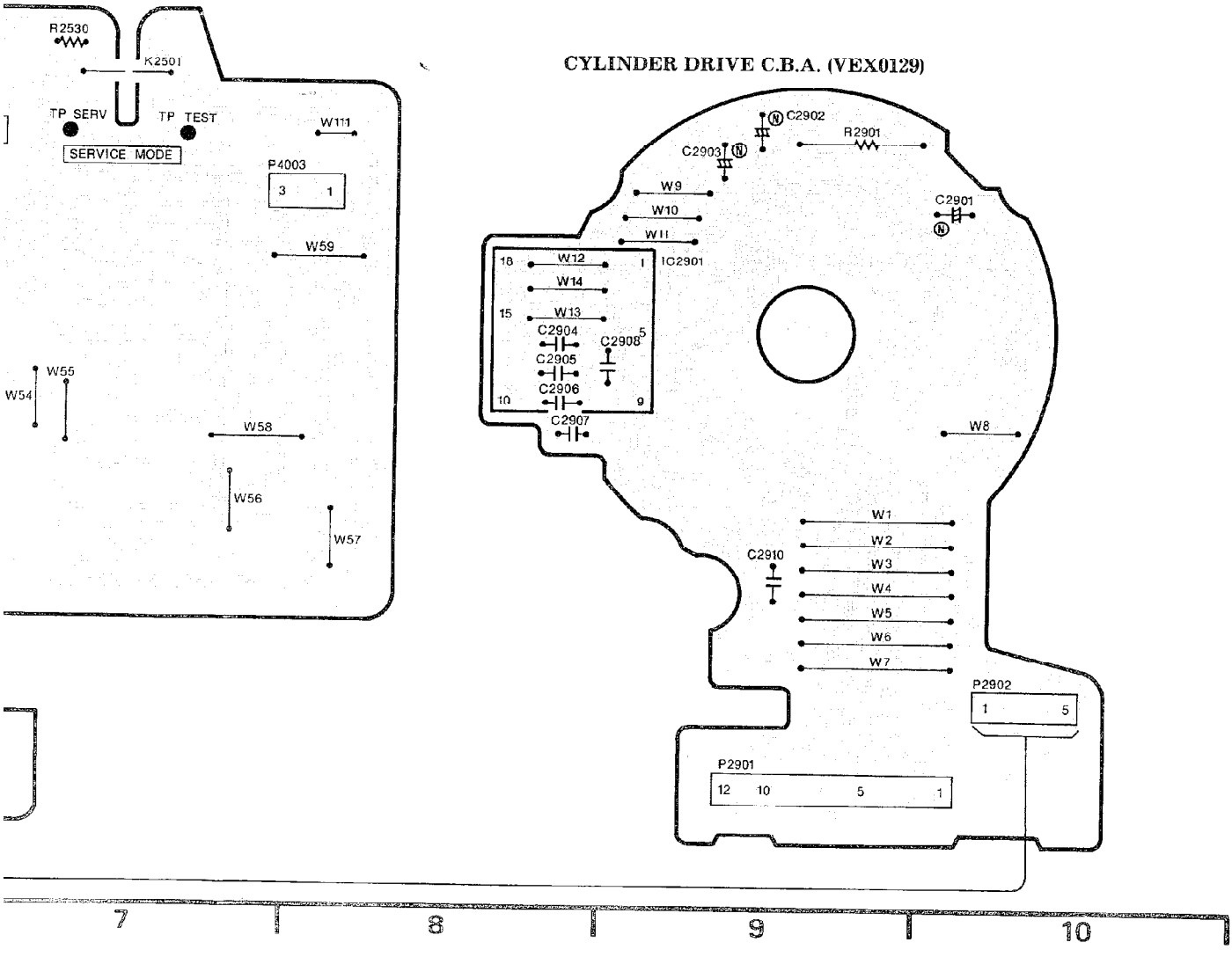
4-7. MOTOR DRIVE & SUB AUDIO PACK C B.A. (VEP04469F)



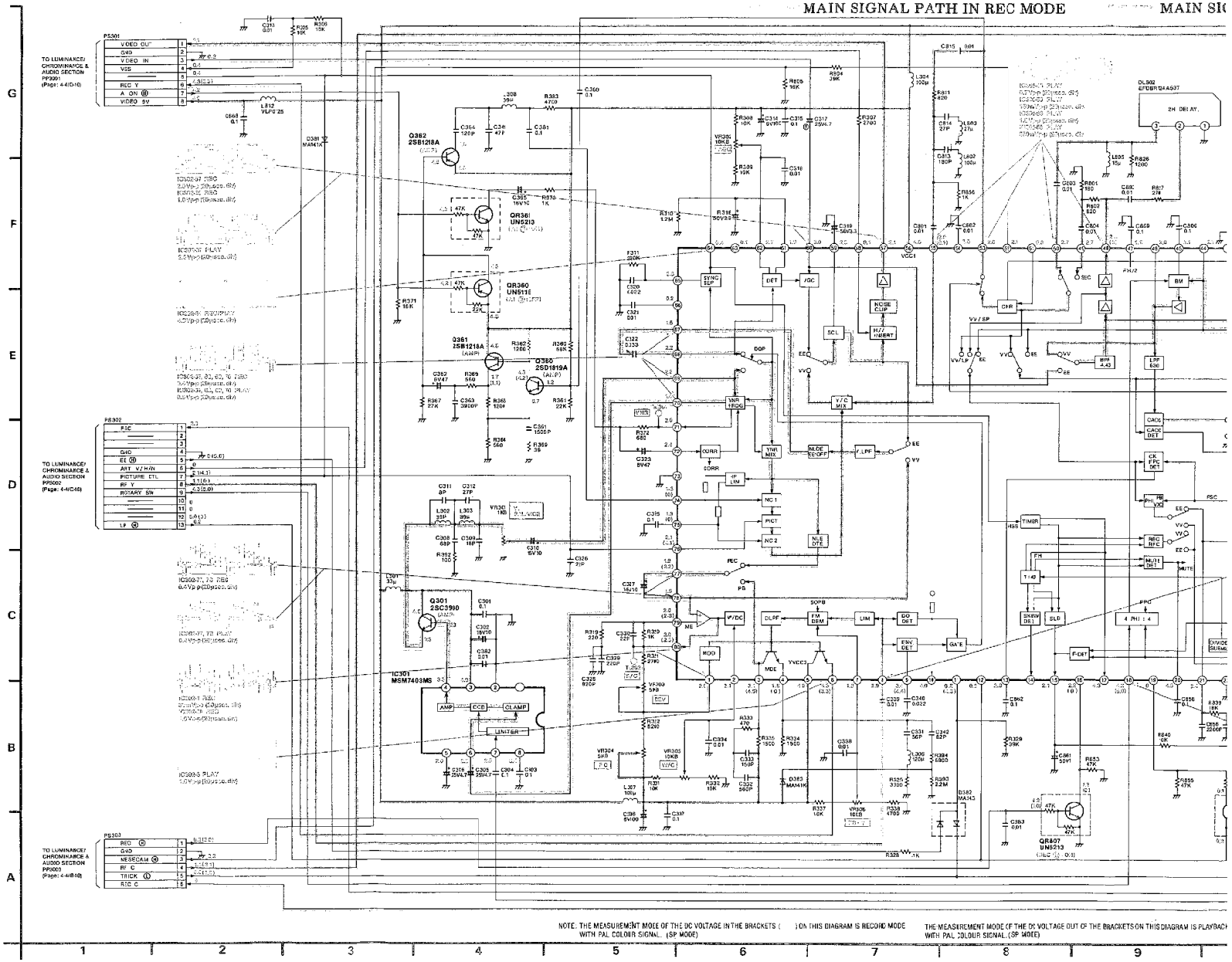
MOTOR DRIVE & SUB AUDIO PACK C.B.A.			
Transistor		**Adjustment**	
Q4701	B-1	VR2006	C-4
Q4703	A-1	VR2011	C-4
Transistor & Resistor		VR4001	C-2
QR4703	A-1	**Connector**	
Integrated Circuit		P2003	C-2
IC2501	B-3	P2501	C-2
IC2902	B-8	P2502	C-5
Test Point		P2901	A-9
TP2026	B-5	P2902	A-10
TP2050	C-7	P4002	C-1
TP2051	C-4	P4003	C-7
TP4002	C-1	PS2501	A-4
TP4003	C-1	PS4701	A-1
TP SERV	C-7		
TP TEST	C-7		

ADDRESS INFORMATION

CYLINDER DRIVE C.B.A. (VEX0129)

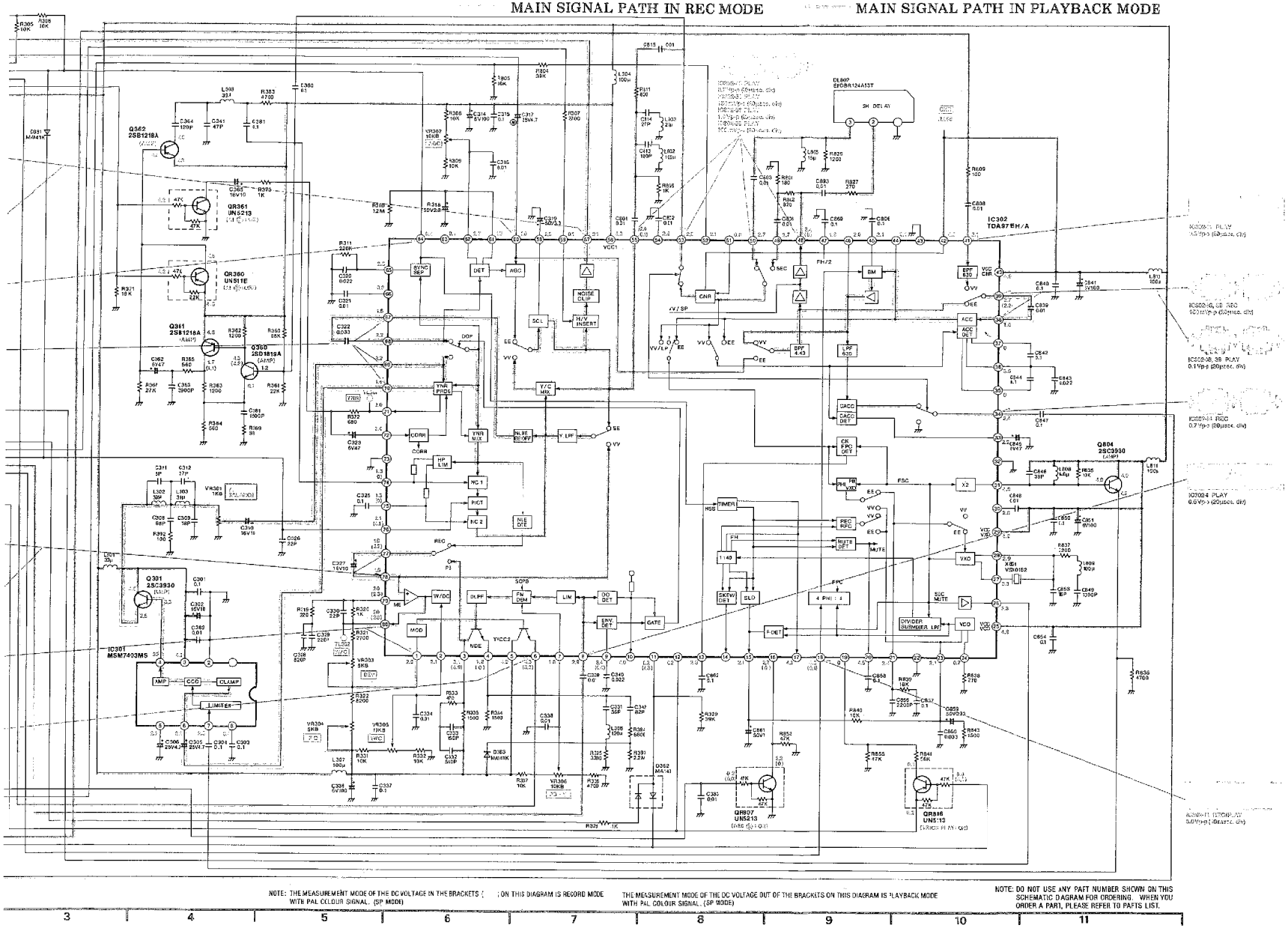


4-8 LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE
MAIN SI
TO LUMINANCE/ CHROMINANCE & AUDIO SECTION PP3001 (Page: 4-4/D-10)
TO LUMINANCE/ CHROMINANCE & AUDIO SECTION PP3002 (Page: 4-4/D-10)
TO LUMINANCE/ CHROMINANCE & AUDIO SECTION PP3003 (Page: 4-4/B-10)
Q382 2SB1218A
Q361 2SB1218A
Q360 2SD1819A
Q301 2SC3990
IC301 MSM7403MS
QR361 UN5213
QR360 UN5113
QR807 UN5213
2H DELAY
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK WITH PAL COLOUR SIGNAL. (SP MODE)

FINANCE PACK SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE — MAIN SIGNAL PATH IN PLAYBACK MODE

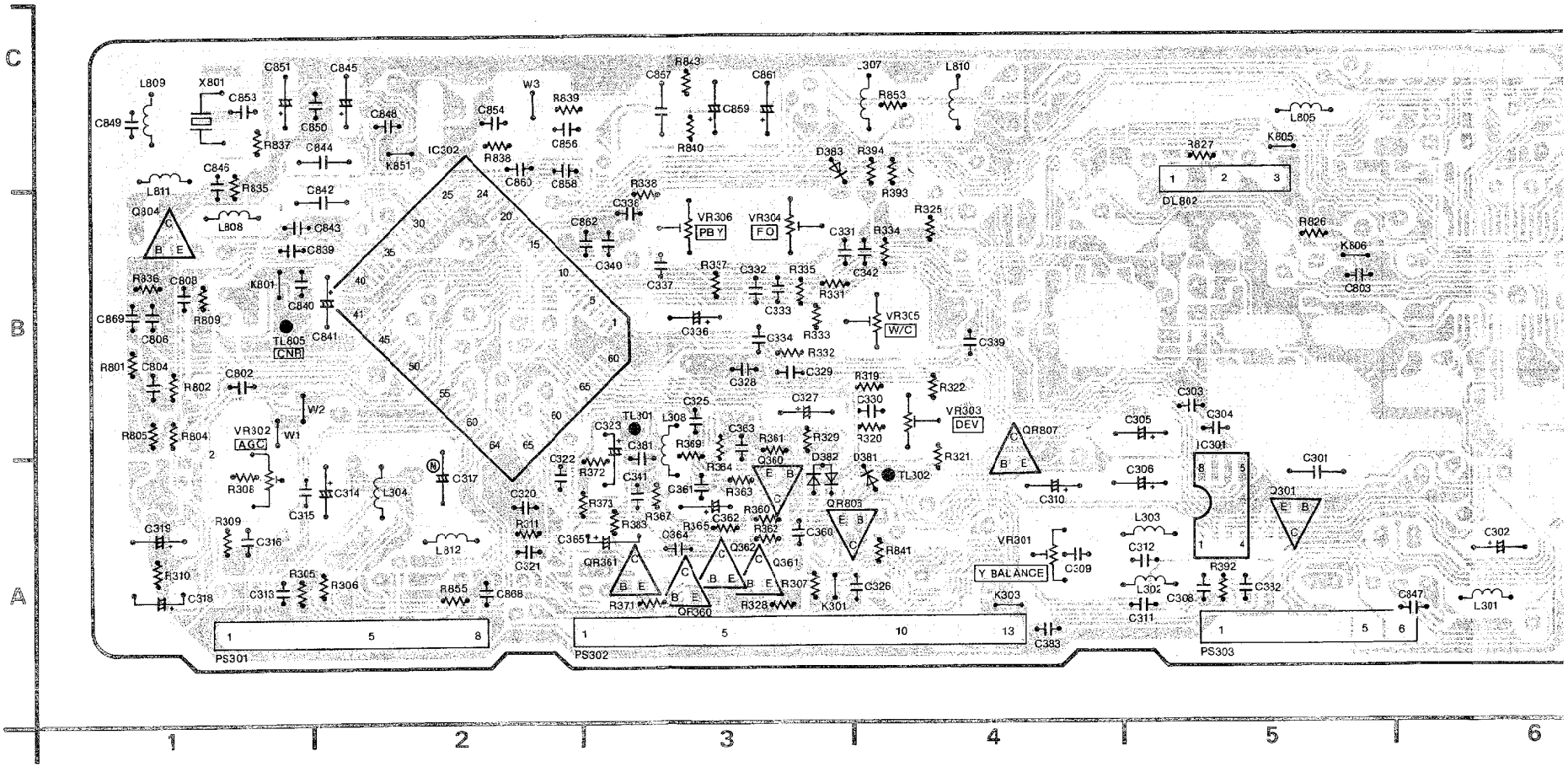


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

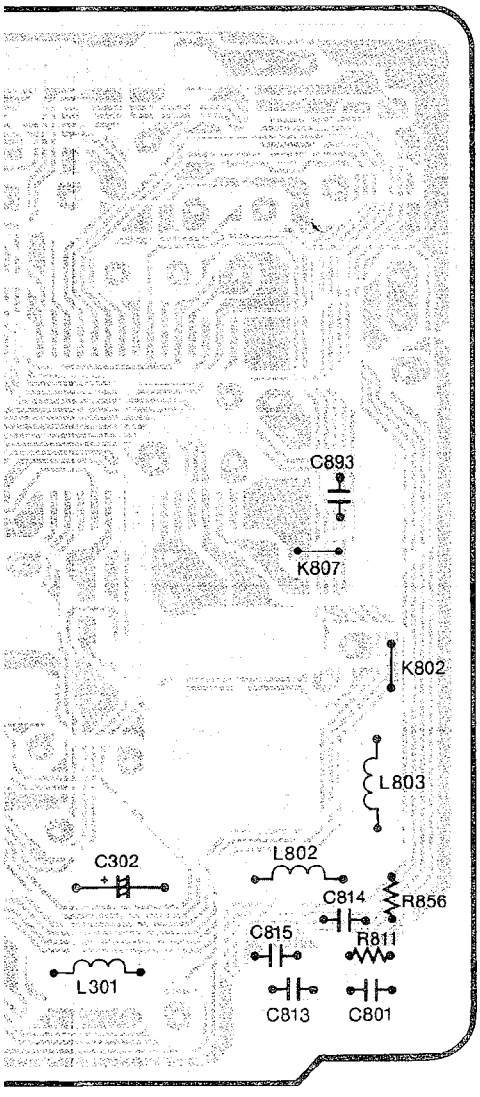
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-9 LUMINANCE & CHROMINANCE PACK C.B A. (VEP03B46C)



LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q301	A-5
Q360	A-3
Q361	A-3
Q362	A-3
Q804	B-1
Transistor & Resistor	
QR360	A-3
QR361	A-3
QR806	A-3
QR807	B-4
Integrated Circuit	
IC301	A-5
IC302	C-2
Test Point	
TL301	B-3
TL302	A-4
TL801	B-6
TL805	B-1
TL807	C-6
Adjustment	
VR301	A-4
VR302	A-1
VR303	B-4
VR304	B-3
VR305	B-4
VR306	B-3
Connector	
PS301	A-1
PS302	A-3
PS303	A-5

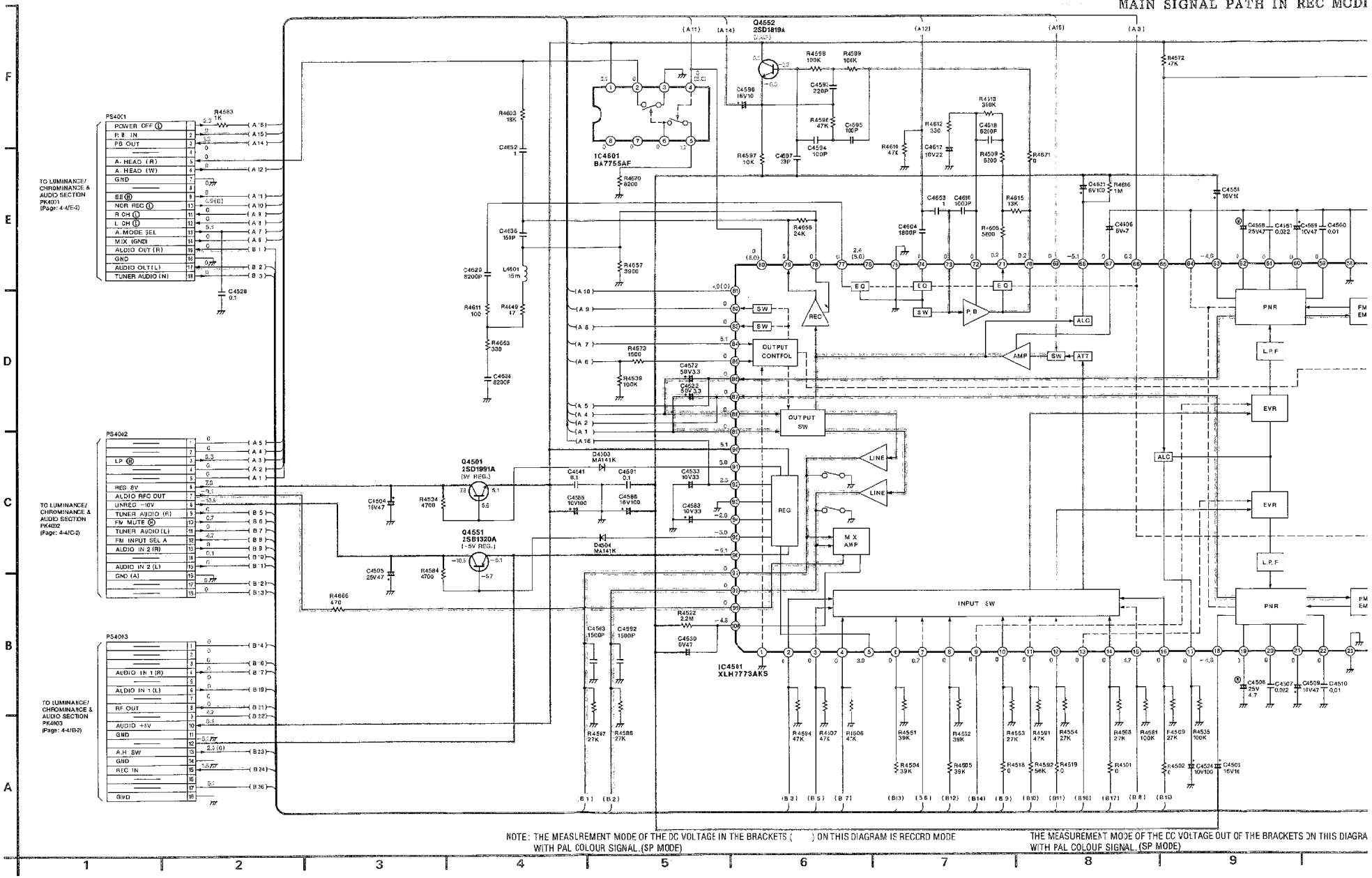
ADDRESS INFORMATION



6

4-10. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE

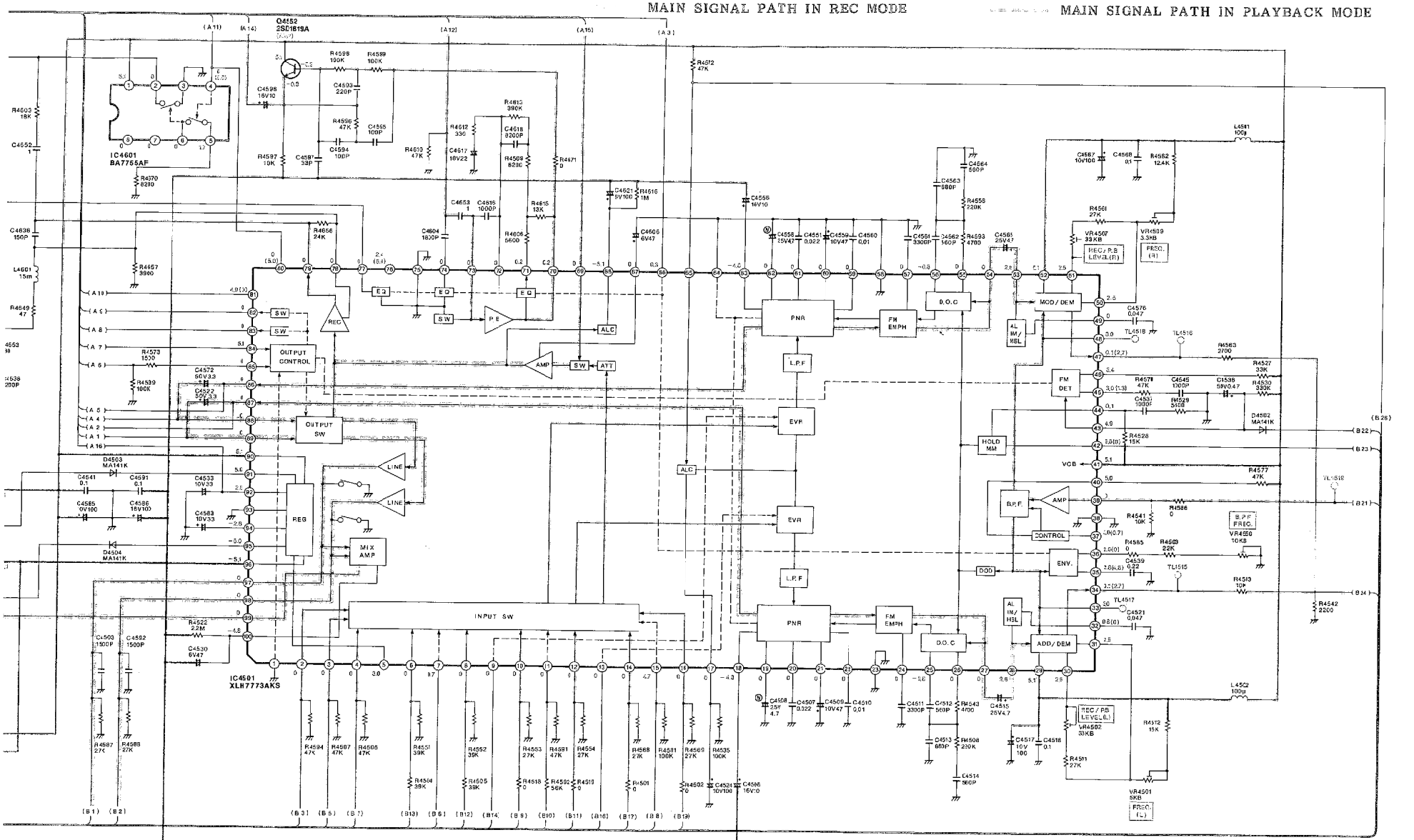


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRA WITH PAL COLOUR SIGNAL. (SP MODE)

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

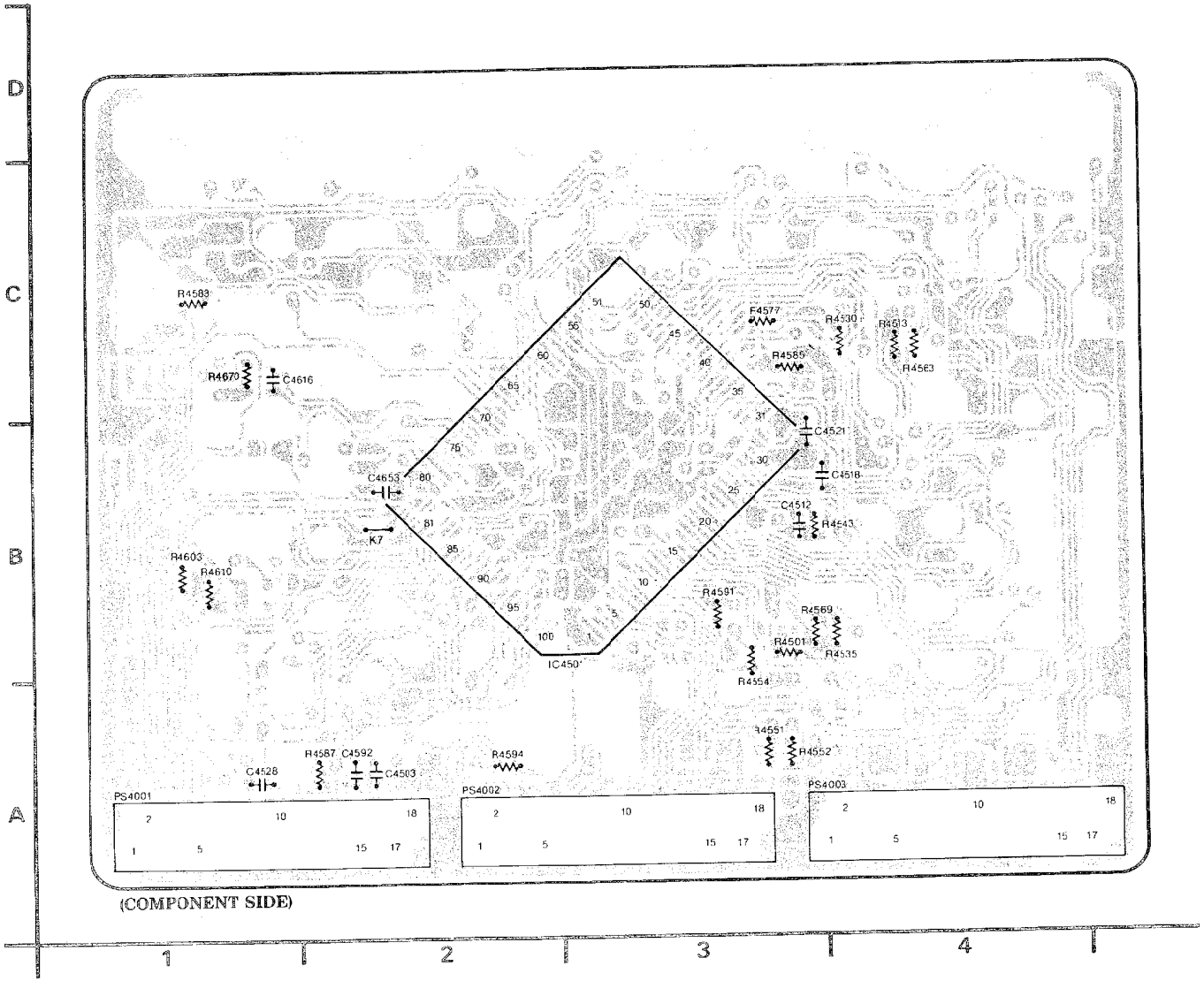


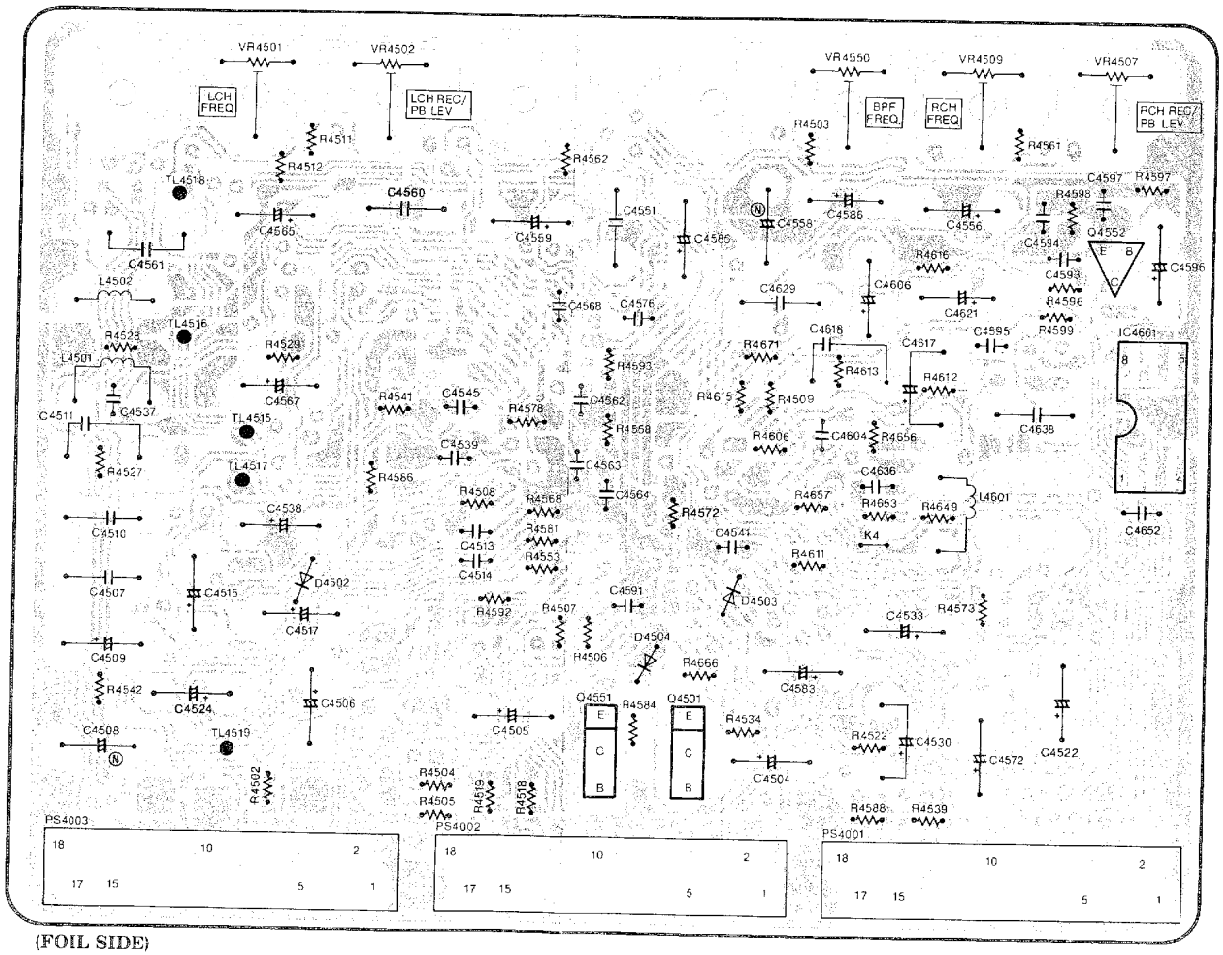
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-11. Hi-Fi AUDIO PACK C B A (VEP04447PK)





(FOIL SIDE)

Hi-Fi AUDIO PACK C.B.A.	
Transistor	
Q4501	A-7
Q4551	A-7
Q4552	C-9
Integrated Circuit	
IC4501	B-3
IC4601	C-9
Adjustmen:	
VR4501	D-6
VR4502	D-6
VR4507	D-9
VR4509	D-8
VR4550	D-8
Test Point	
TL4515	B-6
TL4516	C-5
TL4517	B-6
TL4518	C-5
TL4519	A-6
Connector	
PS4001	A-1
PS4001	A-8
PS4002	A-2
PS4002	A-7
PS4003	A-4
PS4003	A-5

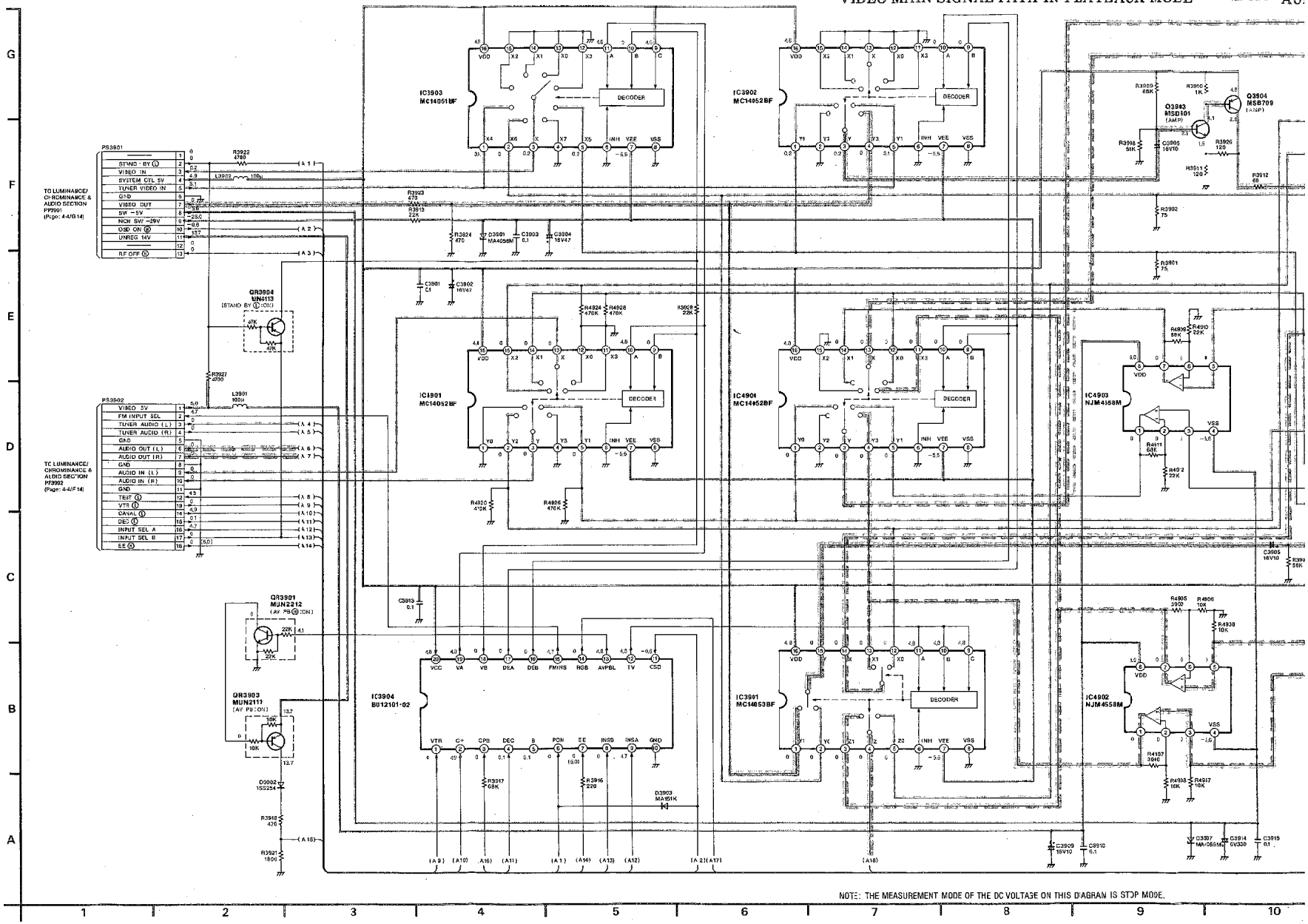
ADDRESS INFORMATION

5 6 7 8 9

4-12. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

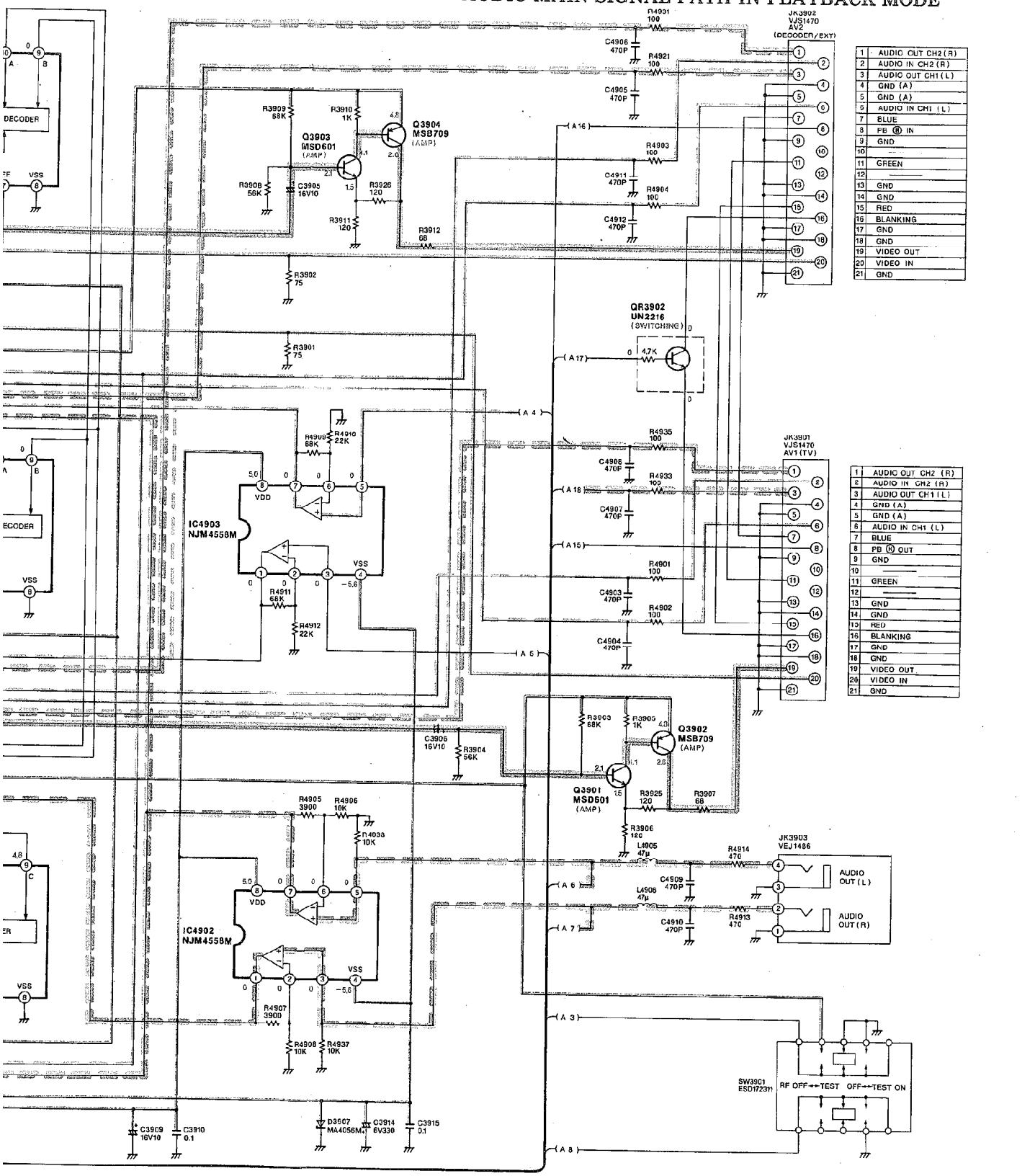
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

SIGNAL PATH IN REC MODE
SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

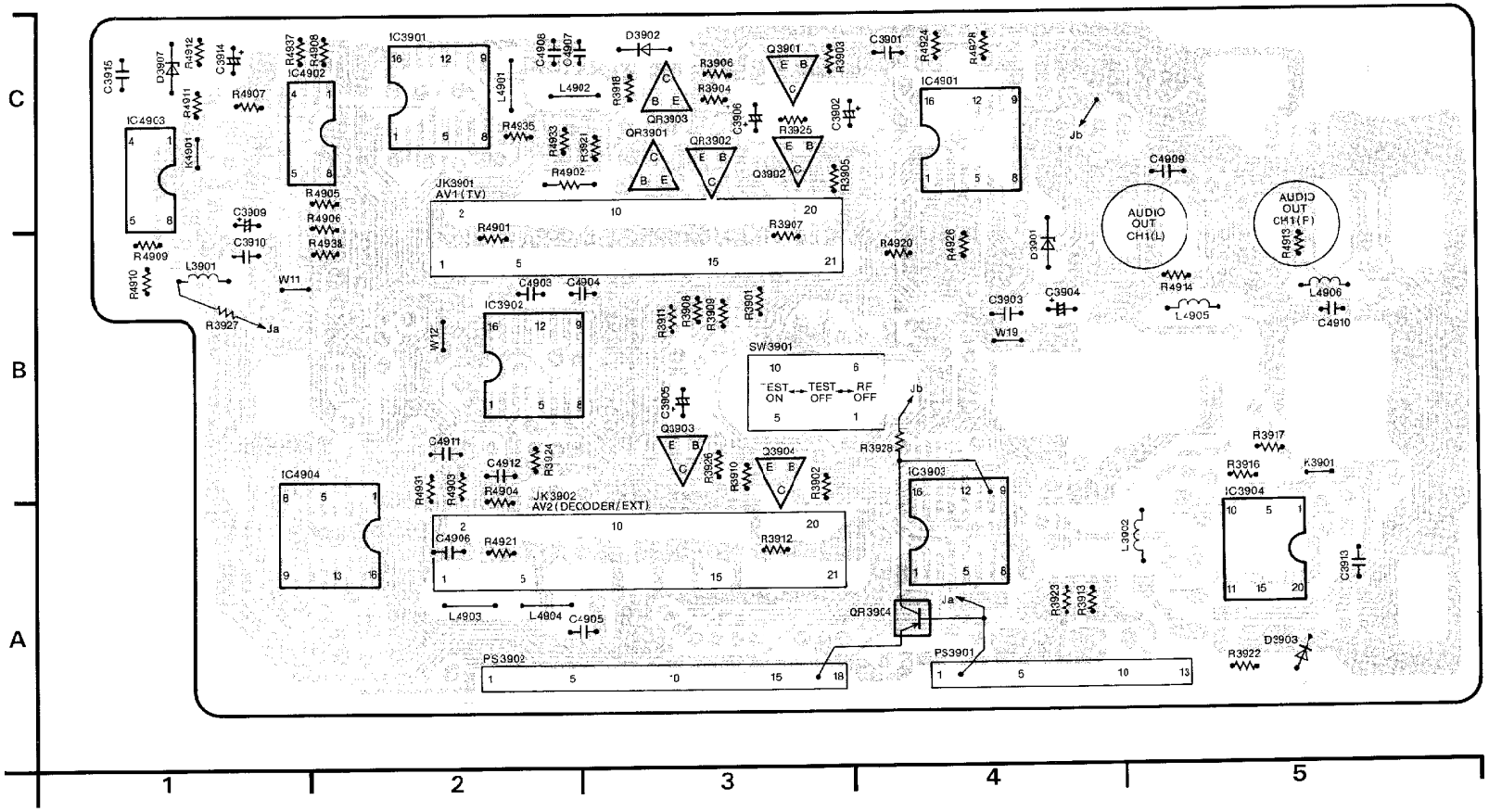


DE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

8 9 10 11 12 13

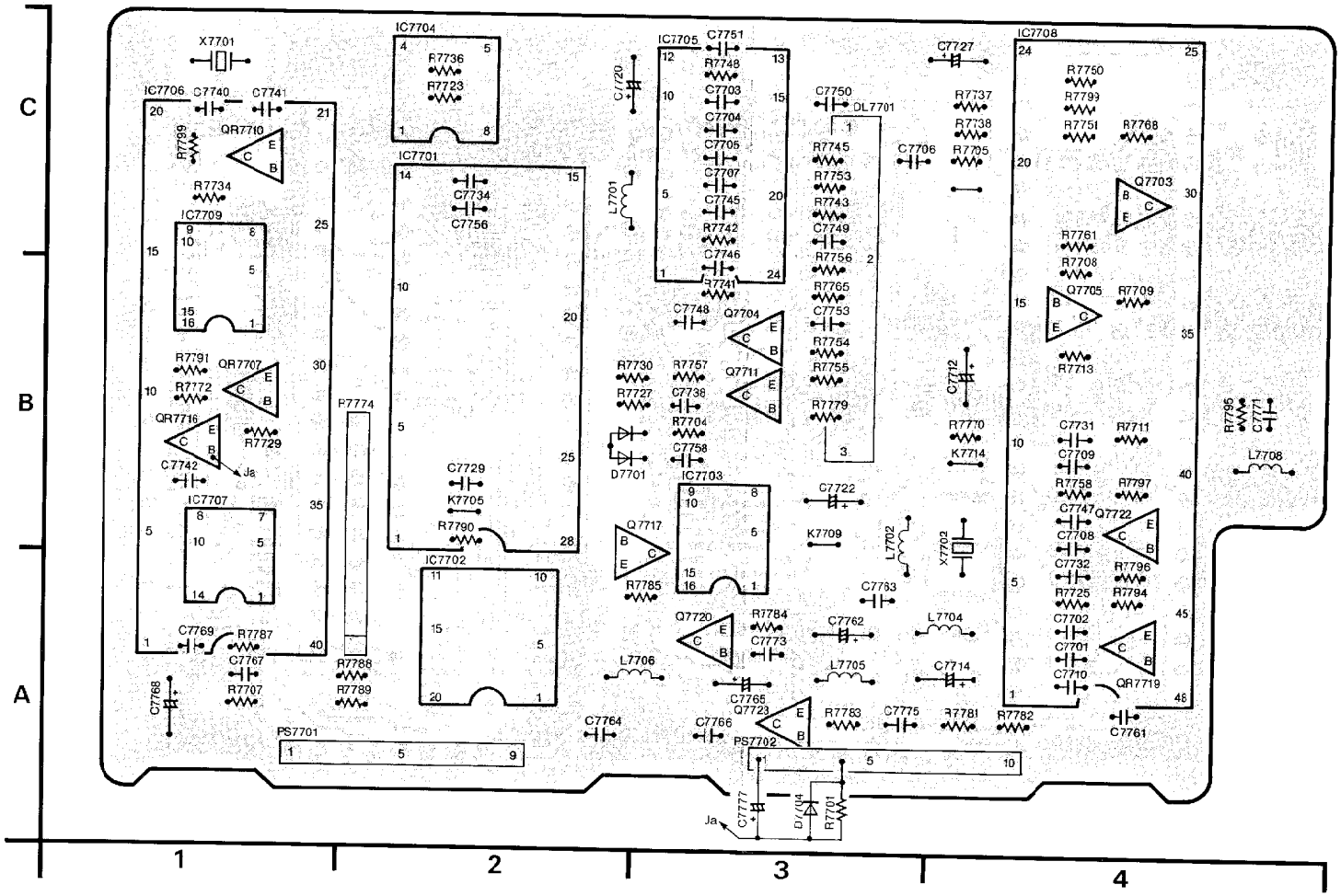
4-13. INPUT/OUTPUT PACK C.B.A. (VEP03B23B)



INPUT/OUTPUT PACK C.B.A	
Transistor	
Q3901	C-3
Q3902	C-3
Q3903	B-3
Q3904	B-3
Transistor & Resistor	
QR3901	C-3
QR3902	C-3
QR3903	C-3
Integrated Circuit	
IC3901	C-2
IC3902	B-2
IC3903	A-4
IC3904	A-5
IC4901	C-4
IC4902	C-2
IC4903	C-1
IC4904	B-1
Connector	
PS3901	A-2
PS3902	A-4

ADDRESS INFORMATION

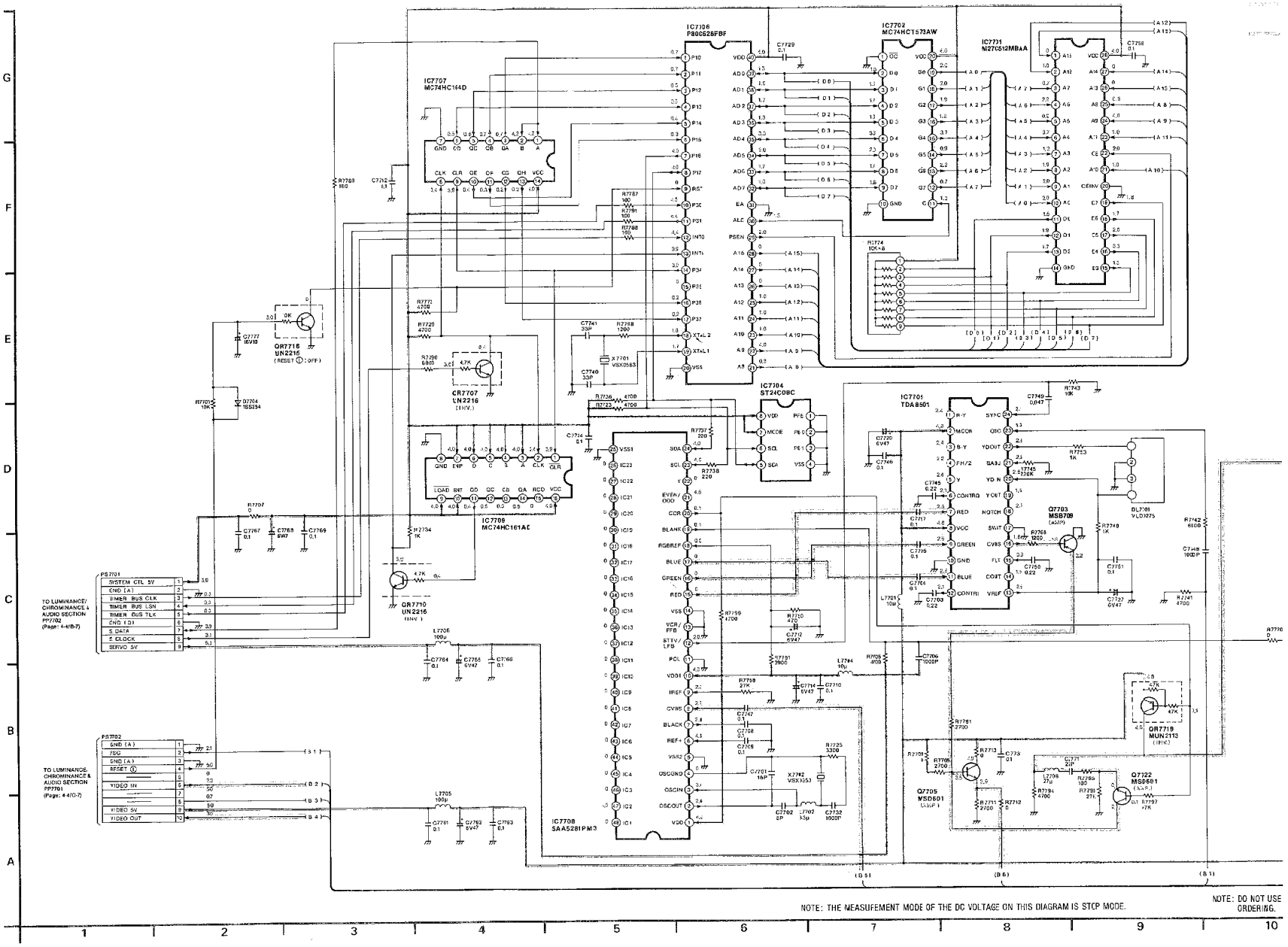
4-14. OSD PACK C.B.A. (VEP06993A)



OSD PACK C.B.A.	
Transistor	
Q7703	C-4
Q7704	B-3
Q7705	B-4
Q7711	B-3
Q7717	B-3
Q7720	A-3
Q7722	B-4
Q7723	A-3
Transistor & Resistor	
QR7707	B-1
QR7710	C-1
QR7716	B-1
QR7719	A-4
Integrated Circuit	
IC7701	C-2
IC7702	A-2
IC7703	B-3
IC7704	C-2
IC7705	C-3
IC7706	C-1
IC7707	E-1
IC7708	C-4
IC7709	C-1
Connector	
PS7701	A-1
PS7702	A-3

ADDRESS INFORMATION

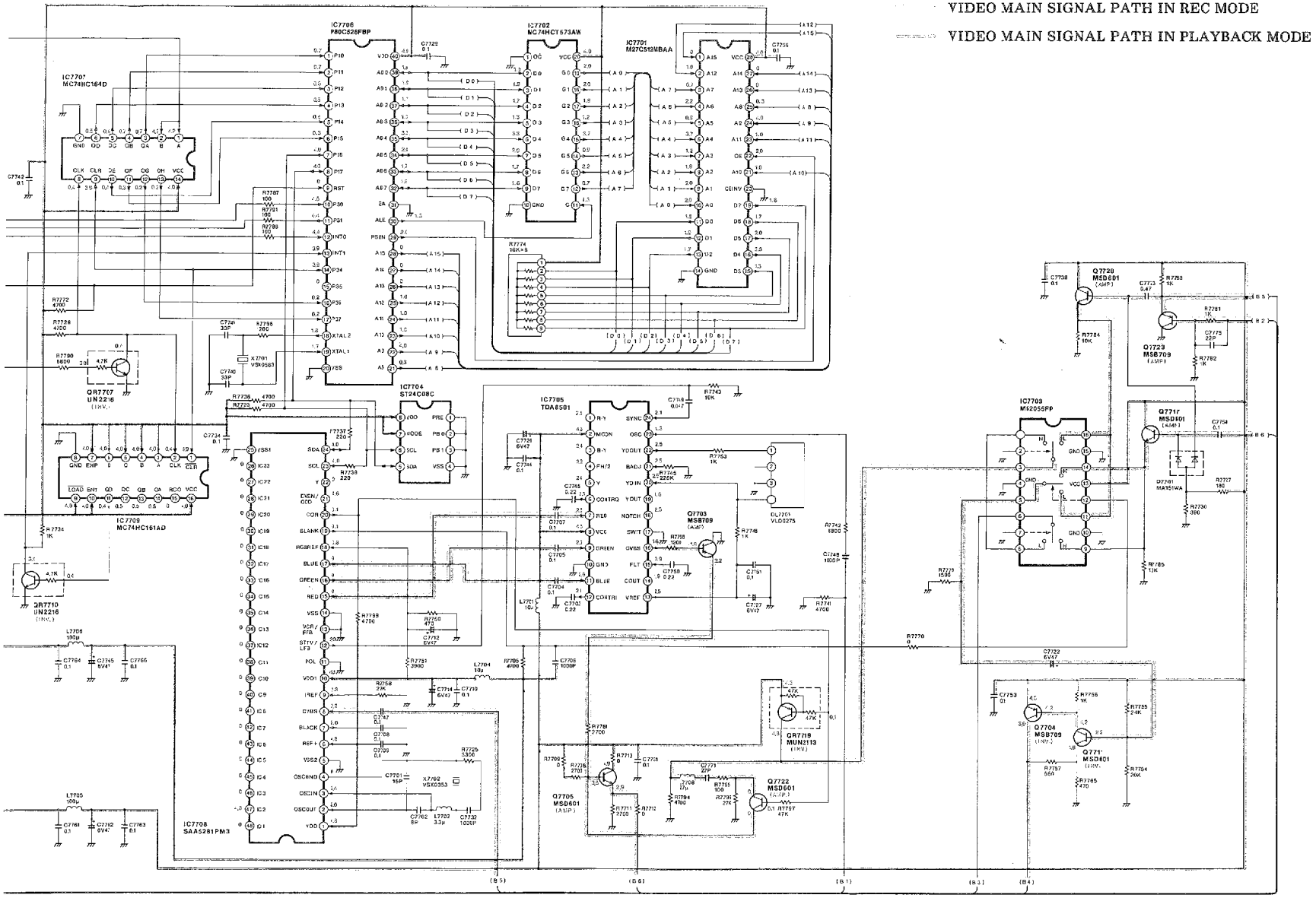
4-15. OSD PACK SCHEMATIC DIAGRAM



VI

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

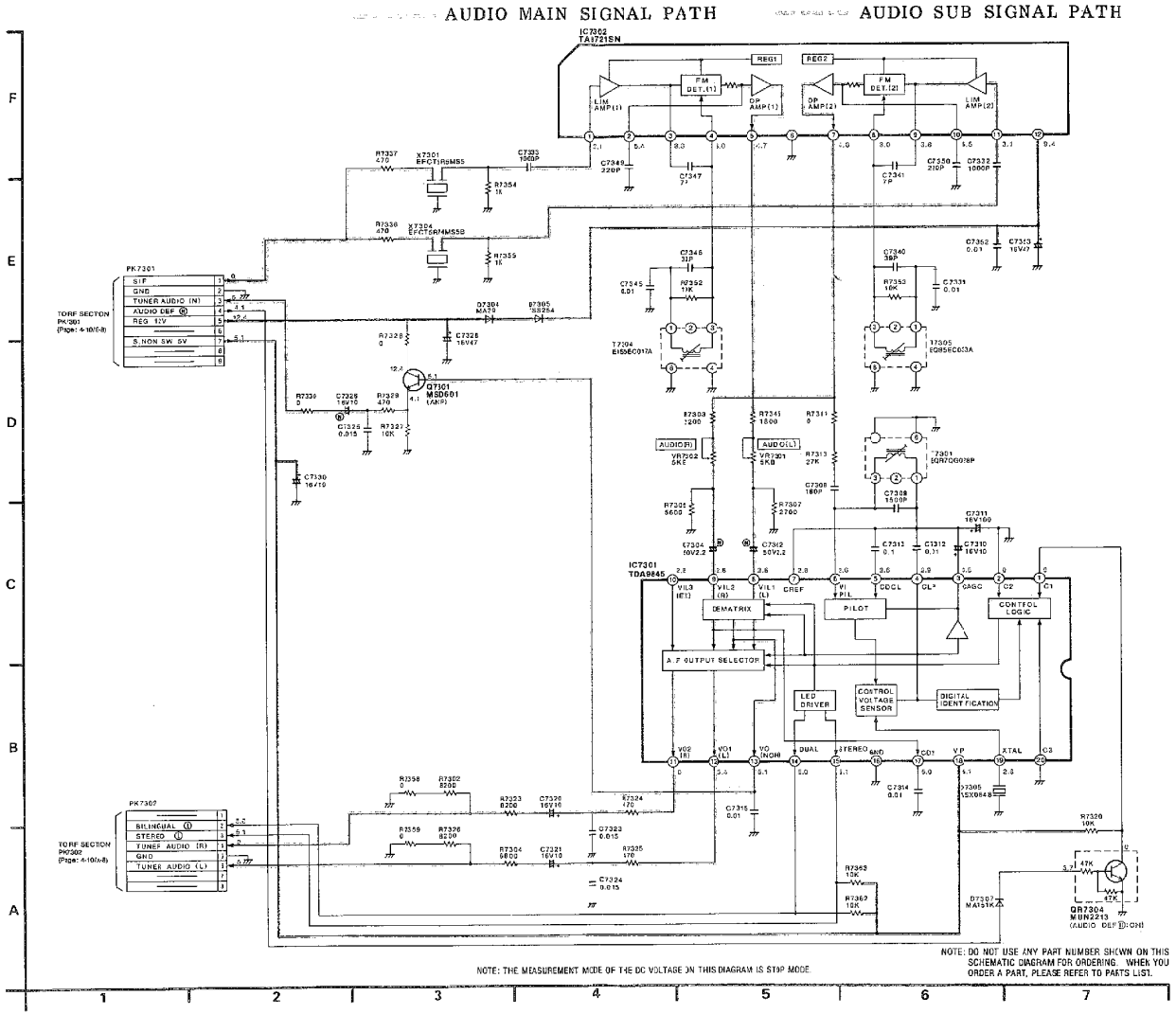


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

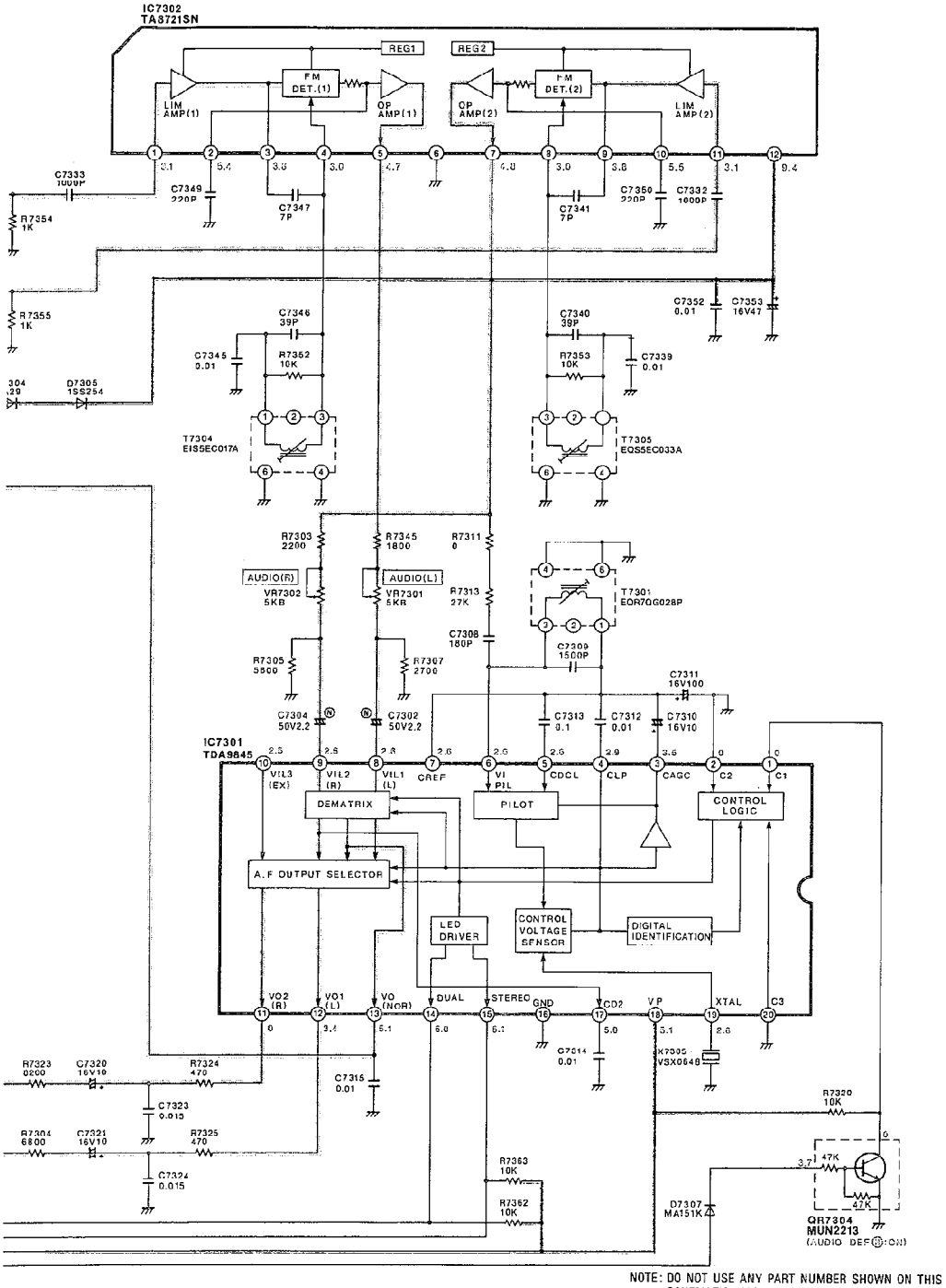
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4 5 6 7 8 9 10 11 12 13

4-16 DECODER PACK SCHEMATIC DIAGRAM



IO MAIN SIGNAL PATH AUDIO SUB SIGNAL PATH



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

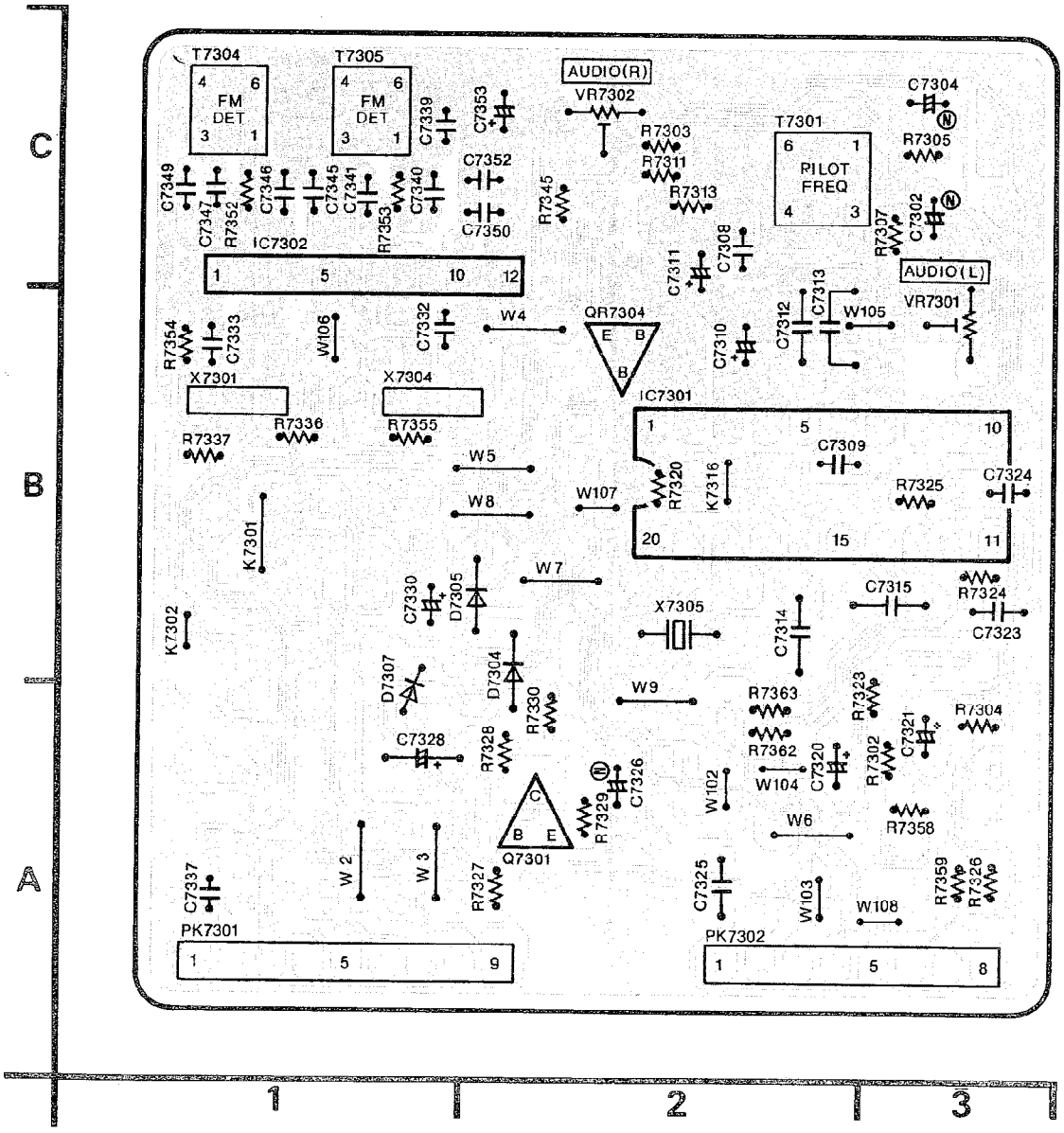
TE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

4 5 6 7

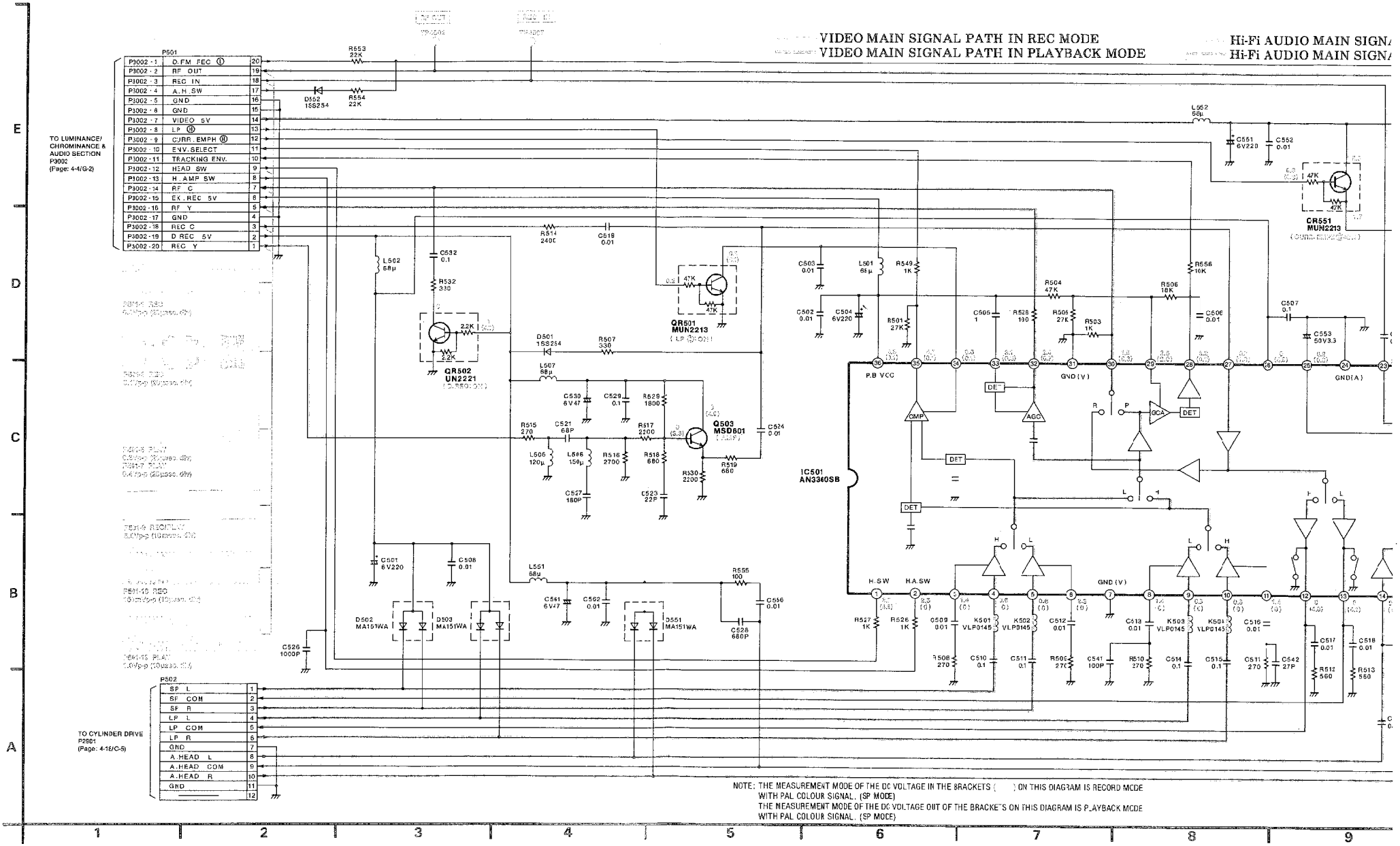
4-17 DECODER PACK C B A (VEP07784A)

DECODER PACK C.B.A.	
Transistor	
Q7301	A-2
Transistor & Resistor	
QR7304	B-2
Integrated Circuit	
IC7301 IC7302	B-3 C-1
Adjustment	
VR7301 VR7302	B-3 C-2
Connector	
PK7301 PK7302	A-1 A-2

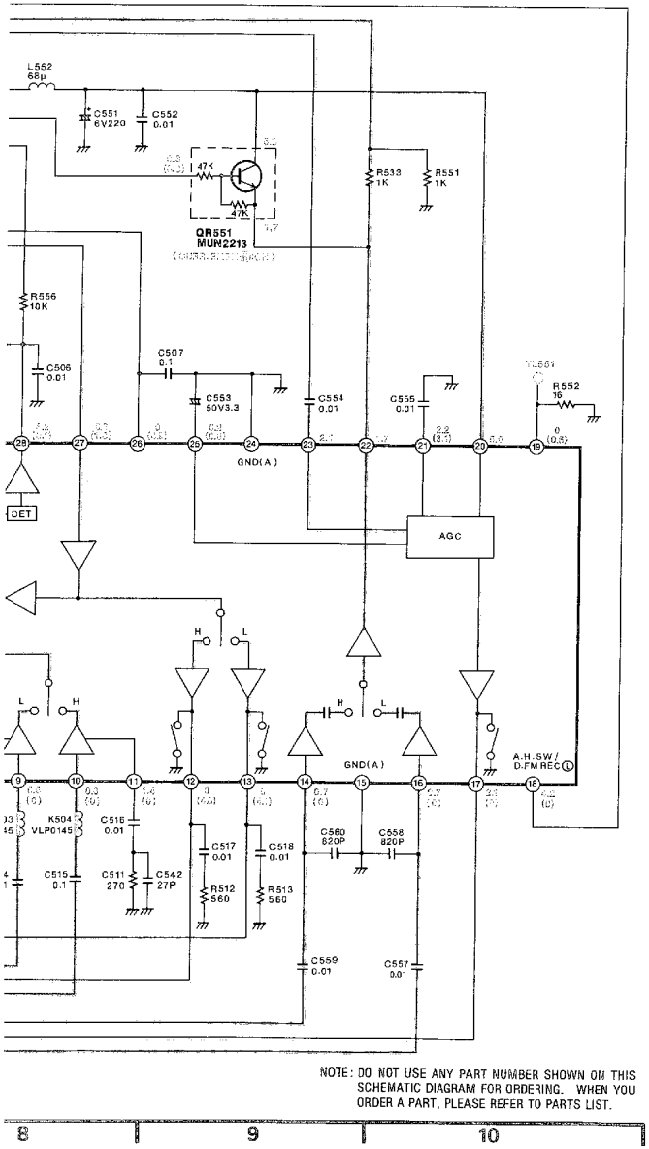
ADDRESS INFORMATION



4-18 HEAD AMP SCHEMATIC DIAGRAM



Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



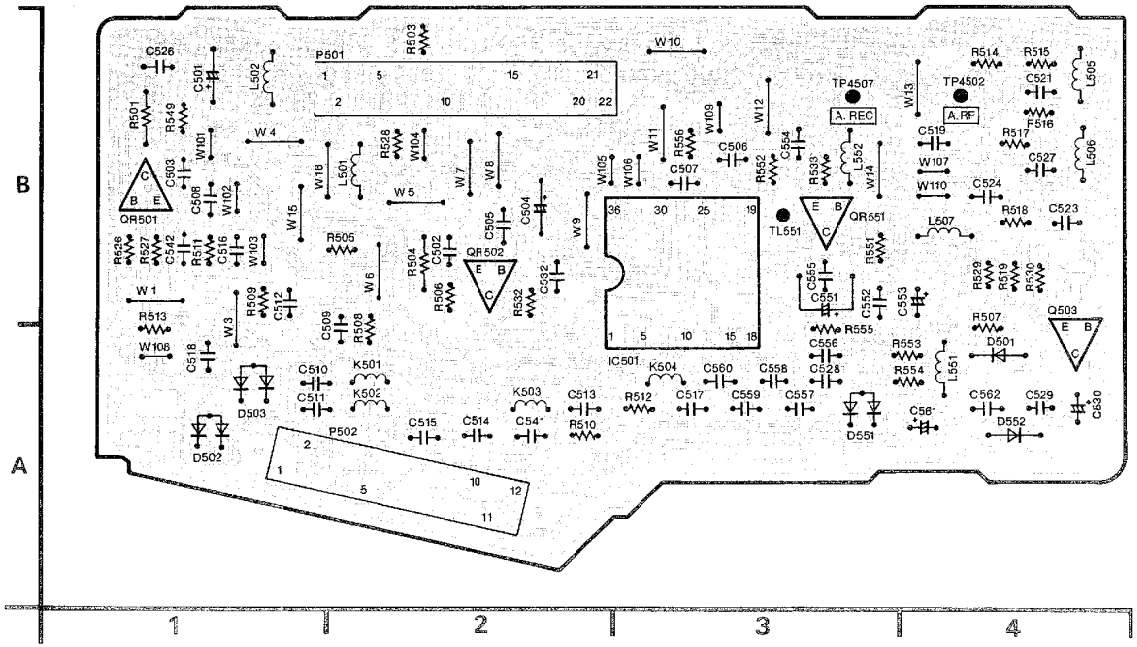
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

8 9 10

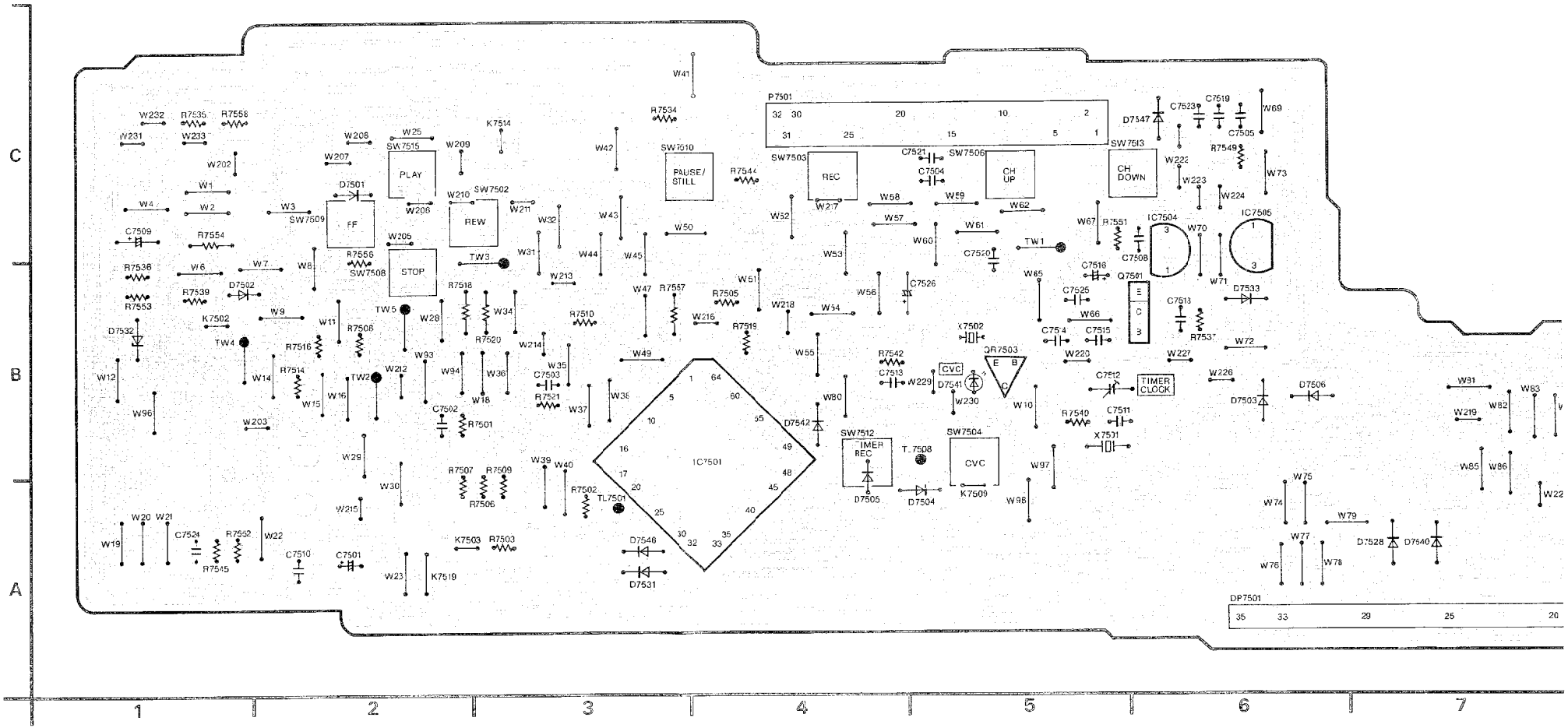
4-19 HEAD AMP C.B.A (VEP05204A)

HEAD AMP C.B.A.	
Transistor	
Q503	A-4
Transistor & Resistor	
QR501 QR502 QR551	B-1 B-2 B-3
Integrated Circuit	
IC501	A-3
Test Point	
TL551 TP4502 TP4507	B-3 B-4 B-3
Connector	
P501 P502	B-2 A-2

ADDRESS INFORMATION

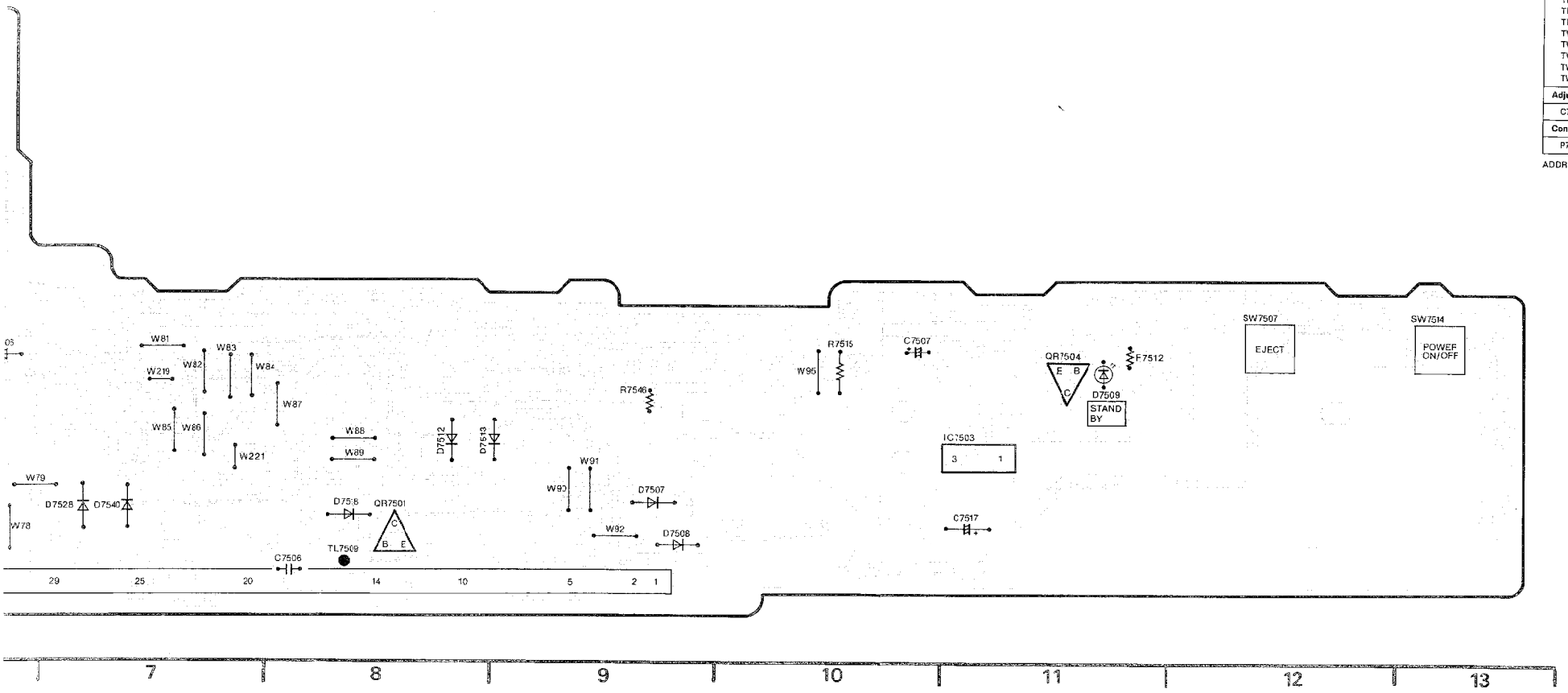


4-20 TIMER C.B A. (VEP07817A)

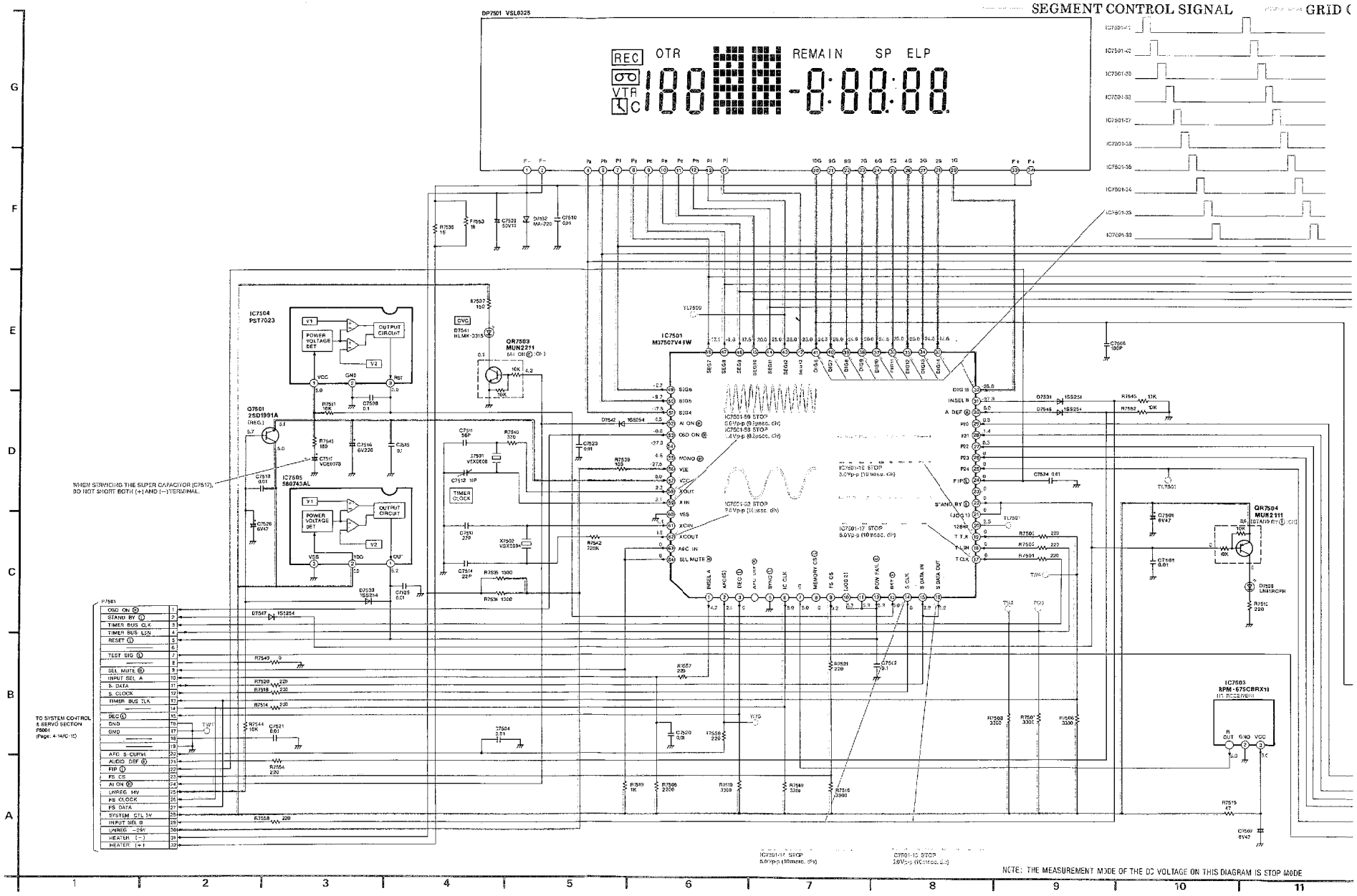


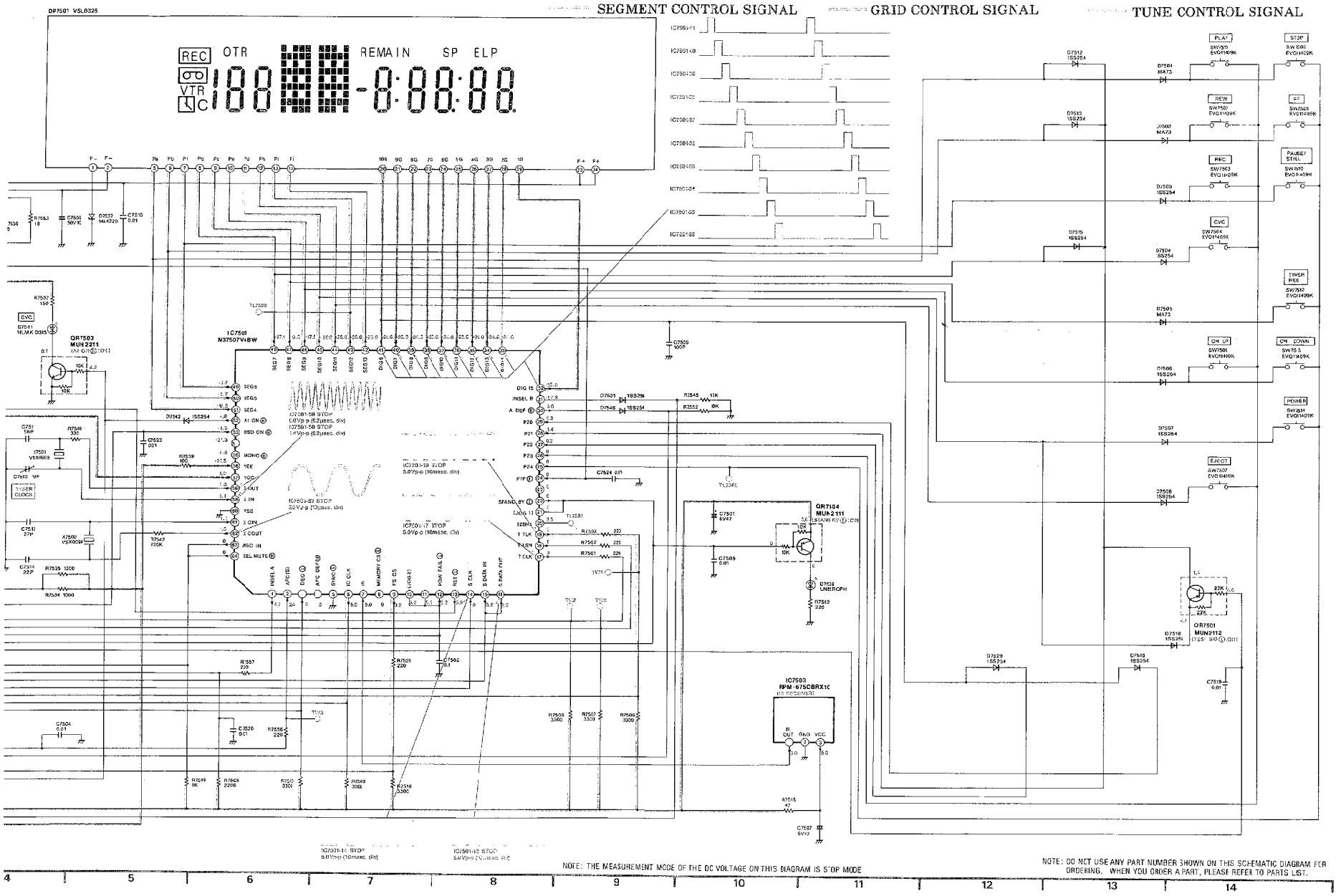
TIMER C.B.A.	
Transistor	
Q7501	B-5
Transistor & Resistor	
QR7501	A-5
QR7503	B-5
QR7504	B-11
Integrated Circuit	
IC7501	B-4
IC7503	A-11
IC7504	C-6
IC7505	C-6
Test Point	
TL7501	A-2
TL7508	B-5
TL7509	A-8
TW1	C-1
TW2	B-2
TW3	B-3
TW4	B-1
TW5	B-5
Adjustment	
C7512	B-5
Connector	
P7501	C-4

ADDRESS INFORMATION

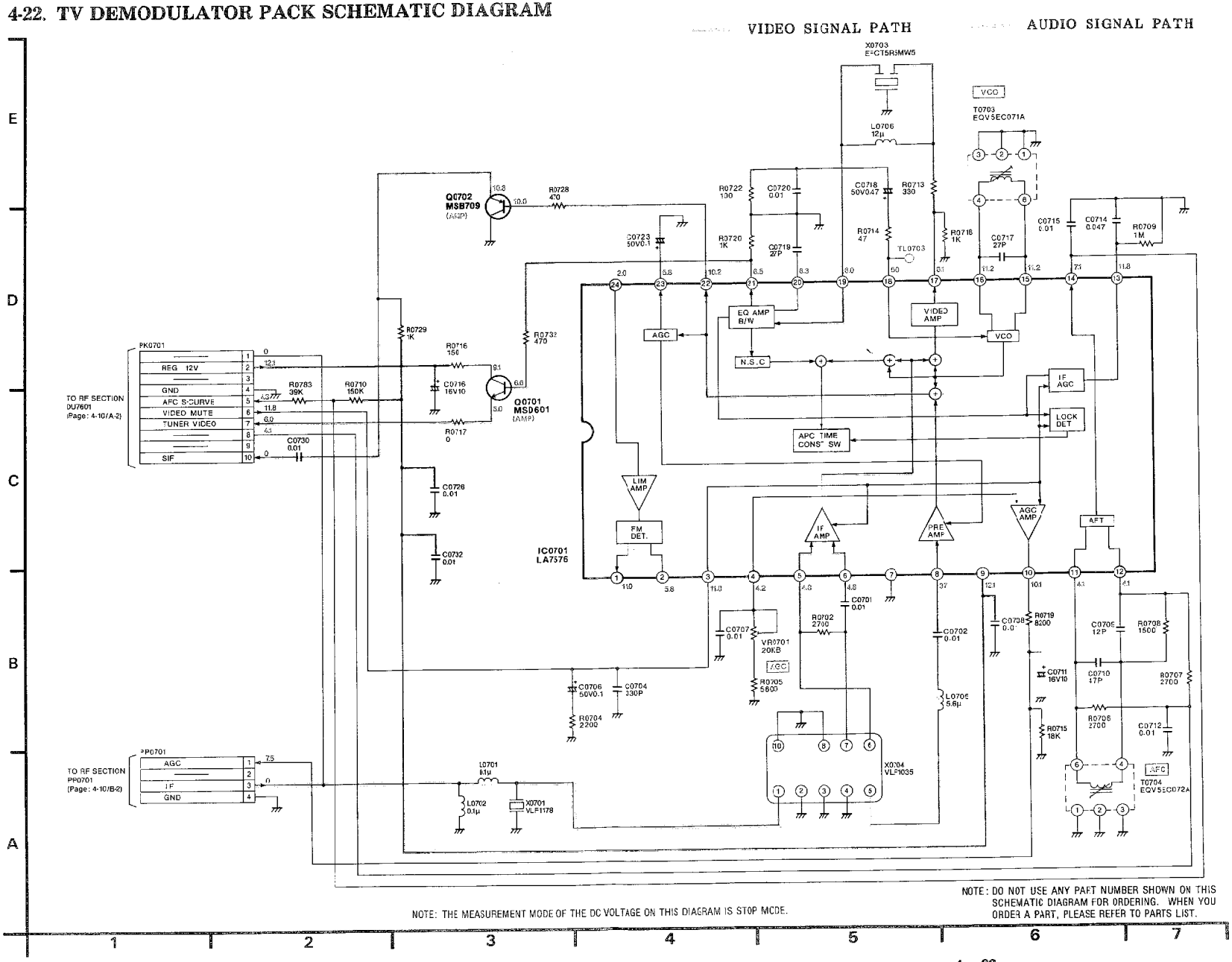


4-21. TIMER SCHEMATIC DIAGRAM




SEGMENT CONTROL SIGNAL
GRID CONTROL SIGNAL
TUNE CONTROL SIGNAL
DP7501 VSL0325
REC
OTR
VTR
REMAIN
SP
ELP
IC7501
N37507V4BW
QR7503
MUN2211
QR7504
MUN2111
QR7501
MUN2112
IC7503
RPM-675CBRX1C
PLAY
STOP
REW
FF
REC
PAUSE/STILL
CVC
TIMER REC
CH UP
CH DOWN
POWER
EJECT
TIMER CLOCK
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

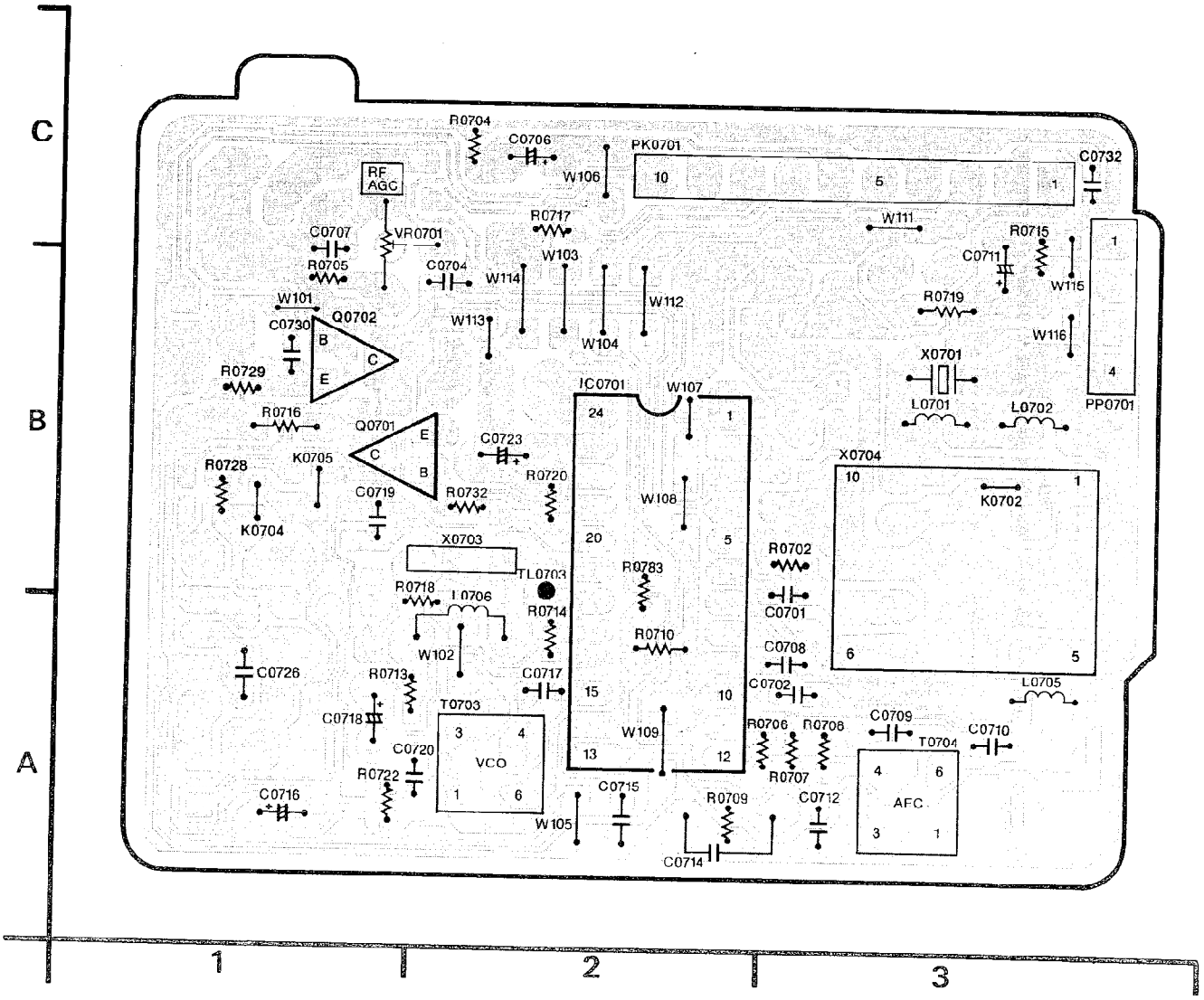
4-22. TV DEMODULATOR PACK SCHEMATIC DIAGRAM



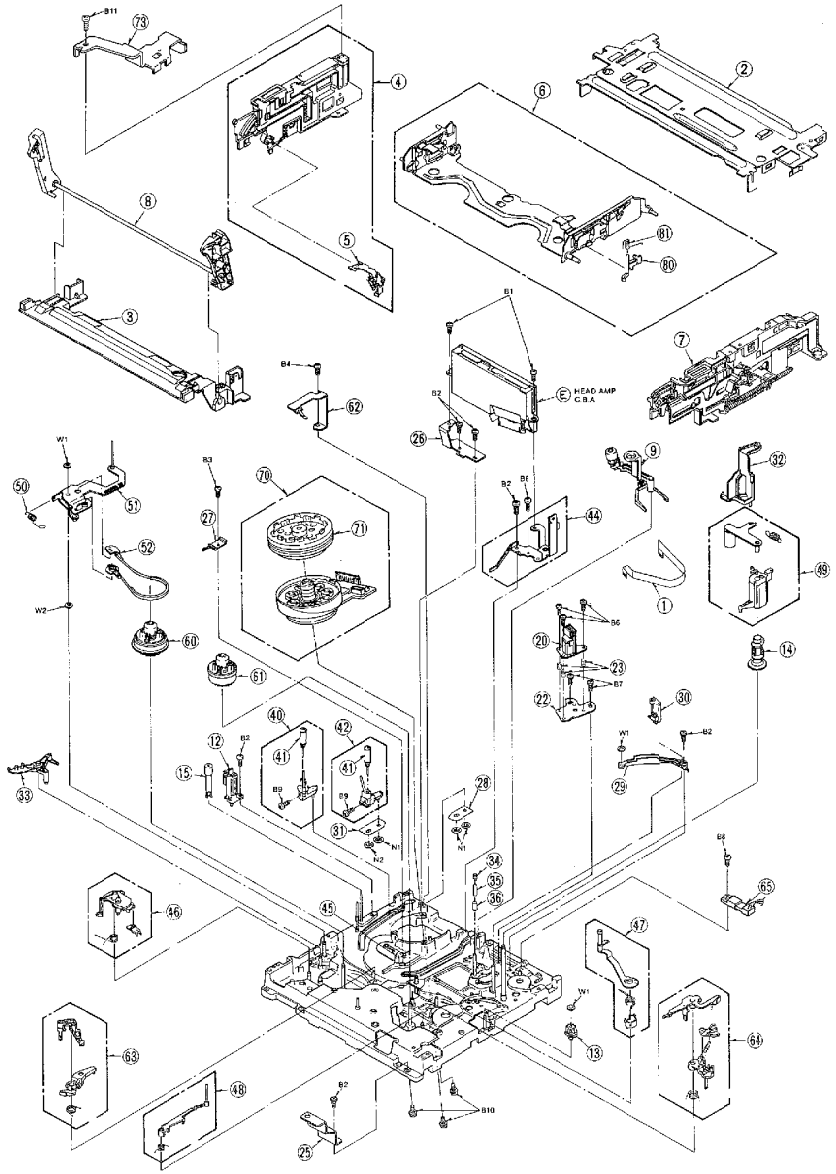
4-23 TV DEMODULATOR PACK C B A (VEP07801B)

TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0701 Q0702	B-1 B-1
Integrated Circuit	
IC0701	B-2
Test Point	
TL0703	B-2
Adjustment	
T0703 T0704 VR0701	A-2 A-3 C-1
Connector	
PK0701 PP0701	C-2 C-3

ADDRESS INFORMATION



SECTION 5
EXPLODED VIEWS & PARTS LIST
5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST
❶ CHASSIS PARTS SECTION (1)



Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0743	FLEXIBLE CABLE (6P)	1	P4002-P1501
2(1)		VXA8644	TOP PLATE	1	
3(1)		VXA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2902	OPENER LEVER	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2440	CLEANER ARM UNIT	1	
12(1)		VES0052	FE HEAD	1	
13(1)		VEG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VEG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0205	A/C HEAD (1 UNIT	1	
22(1)		VXA8624	A/C HEAD BASE	1	
23(1)		VNB2515	A/C HEAD SPRING	3	
25(1)		VXA8761	MOUNT ANGLE	1	
26(1)		VXA9158	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VEC0917	EARTH SPRING	1	
28(1)		VXA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VXA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VXL2776	TENSION SPRING ARM	1	
34(1)		VEX1544	P4 UPPER LIMITER	1	
35(1)		VEX2175	P4 SLEEVE	1	
36(1)		VEX2176	P4 LOWER LIMITER	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2394	TAKE UP TENSION REGULATOR ARM UNIT	1	
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VNB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VZB0810	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0131	EARTH PLATE	1	
63(1)		VZB0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VZB0313	TAKE UP BRAKE ARM UNIT	1	
65(1)		2SB941PSW	POWER TRANSISTOR	1	
70(1)		VEG1177	CYLINDER UNIT	1	[SUPPLIED FROM MBV]
71(1)		VXP1515	UPPER CYLINDER UNIT	1	[SUPPLIED FROM MBV]
73(1)		VXA9201	CYLINDER ANGLE	1	
80(1)		VXL2680	RELEASE LEVER	1	
81(1)		VNB2013	RELEASE SPRING	1	
B1(1)		VHD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	6	
B4(1)		XTN3+6FFZ	SCREW	1	
B3(1)		XTV26+4F	SCREW	1	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	2	
B9(1)		XQN2+BJ6	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		XTB26+8G	SCREW	1	
N1(1)		VEN0192	NUT	3	
N2(1)		VEN0193	NUT	1	
W1(1)		VWX2208	WASHER	3	
W2(1)		XWGV26D5G	WASHER	1	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	CAPSTAN STATOR UNIT	1	
101(2)		VBR0061	FG HEAD	1	
103(2)		VMA8930	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1519	CAPSTAN ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VXG0913	MAIN CAM GEAR	1	
109(2)		VXG0956	SUPPLY REEL GEAR	1	
110(2)		VXG0957	TAKE UP REEL GEAR	1	
111(2)		VXG0868	WORM WHEEL GEAR	1	
112(2)		VXG0885	SUB CAM GEAR	1	
113(2)		VXV0235	TIMING BELT	1	
120(2)		VXG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
126(2)		VXL2725	IDLER CONTROL LEVER	1	
127(2)		VSSD365	MODE SW	1	
128(2)		VXA5138	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2378	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
B102(2)		XTV26+8F	SCREW	1	
B103(2)		XTV26+6F	SCREW	3	
B104(2)		VHD0753	SCREW	4	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26+4FZ	SCREW	1	
W101(2)		VWX2208	WASHER	4	

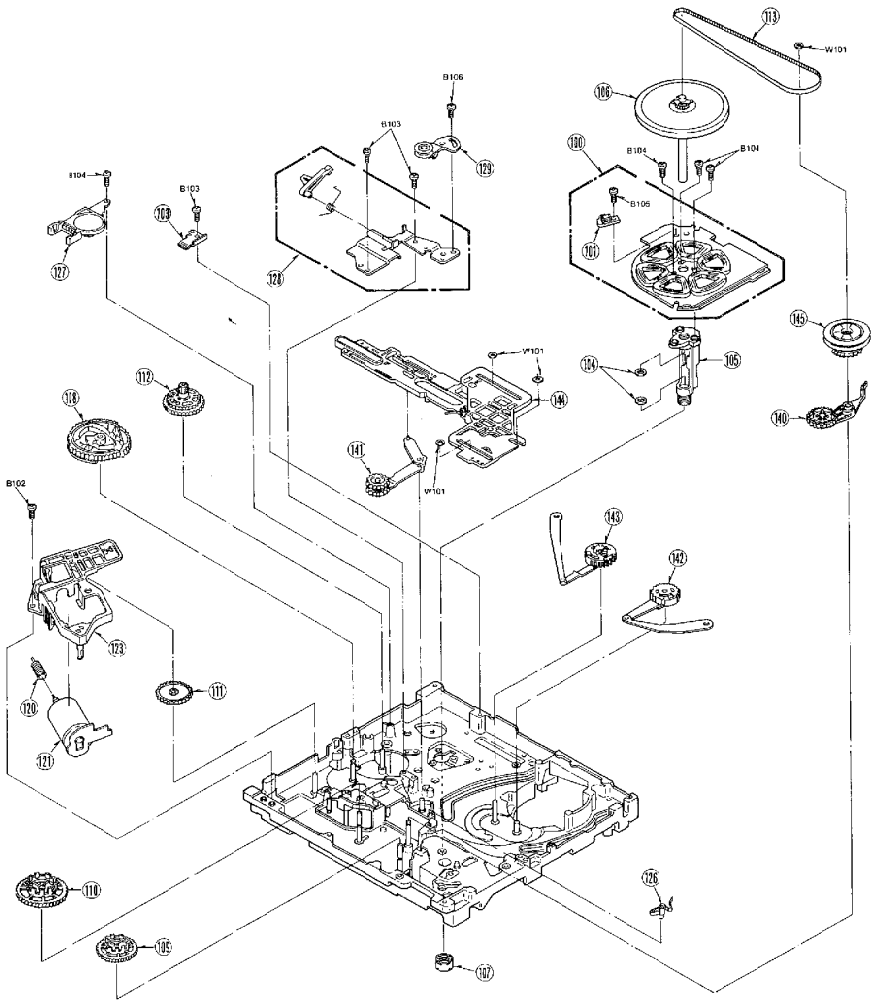
② CHASSIS PARTS SECTION (2)

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0743	FLEXIBLE CABLE (6P)	1	P400Z-P150Z
2(1)		VXA8644	TOP PLATE	1	
3(1)		VXA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2902	OPENER LEVER	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2440	CLEANER ARM UNIT	1	
12(1)		VES0052	PB HEAD	1	
13(1)		VEG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VEG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0205	A/C HEAD (1) UNIT	1	
22(1)		VXA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VXA8761	MOUNT ANGLE	1	
26(1)		VXA9158	HEAD AMP MOUNT ANGLE (1)	1	
27(1)		VXC0917	EARTH SPRING	1	
28(1)		VXA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VXA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VWL2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2394	TAKE UP TENSION REGULATOR ARM UNIT	1	
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VWB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXC0310	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0131	EARTH PLATE	1	
63(1)		VXC0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXC0313	TAKE UP BRAKE ARM UNIT	1	
65(1)		2SB941PSW	POWER TRANSISTOR	1	
70(1)		VEG1177	CYLINDER UNIT	1	(SUPPLIED FROM MBV)
71(1)		VXP1515	UPPER CYLINDER UNIT	1	(SUPPLIED FROM MBV)
73(1)		VWA9201	CYLINDER ANGLE	1	
80(1)		VXL2680	RELEASE LEVER	1	
81(1)		VMB2013	RELEASE SPRING	1	
B1(1)		VBD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	6	
B4(1)		XBN3+6FFZ	SCREW	1	
B5(1)		XTV26+4F	SCREW	1	
B6(1)		VBD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	2	
B9(1)		XQN2+AJ4	SCREW	2	
B10(1)		VBD0342	SCREW	3	
B11(1)		XTB26+8G	SCREW	1	
N1(1)		VBN0192	NUT	3	
N2(1)		VBN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV26D3G	WASHER	1	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
100(2)	VEK5927	CAPSTAN STATOR UNIT	1	
101(2)	VBR0061	PG HEAD	1	
103(2)	VXA8930	ROTOR STOPPER	1	
104(2)	VMX1927	OIL SEAL	2	
105(2)	VXD0140	HOUSING UNIT	1	
106(2)	VXP1515	CAPSTAN ROTOR UNIT	1	
107(2)	VXQ0297	THRUST SCREW UNIT	1	
108(2)	VXG0913	MAIN CAM GEAR	1	
109(2)	VXG0956	SUPPLY REEL GEAR	1	
110(2)	VXG0957	TAKE UP REEL GEAR	1	
111(2)	VXG0868	WORM WHEEL GEAR	1	
112(2)	VXG0885	SUB CAM GEAR	1	
113(2)	VXG0235	TIMING BELT	1	
120(2)	VXG0866	WORM GEAR	1	
121(2)	VXM0427	LOADING MOTOR (1) UNIT	1	
123(2)	VMD1942	MOTOR BRACKET	1	
126(2)	VWL2725	IDLER CONTROL LEVER	1	
127(2)	VSS0365	MODE SW	1	
128(2)	VXA5138	SS BRAKE BASE UNIT	1	
129(2)	VXA4799	TENSION ROLLER UNIT	1	
140(2)	VXL2378	IDLER ARM UNIT	1	
141(2)	VXL2372	DIRECT LEVER UNIT	1	
142(2)	VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)	VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)	VXL2307	MAIN LEVER UNIT	1	
145(2)	VXP1409	CENTRE CLUTCH	1	
B1C2(2)	XTV26+8F	SCREW	1	
B1C3(2)	XTV26+6F	SCREW	3	
B1C4(2)	VBD0753	SCREW	4	
B1C5(2)	VBD0754	SCREW	1	
B1C6(2)	XSB26+4FZ	SCREW	1	
W1C1(2)	VBX2208	WASHER	4	



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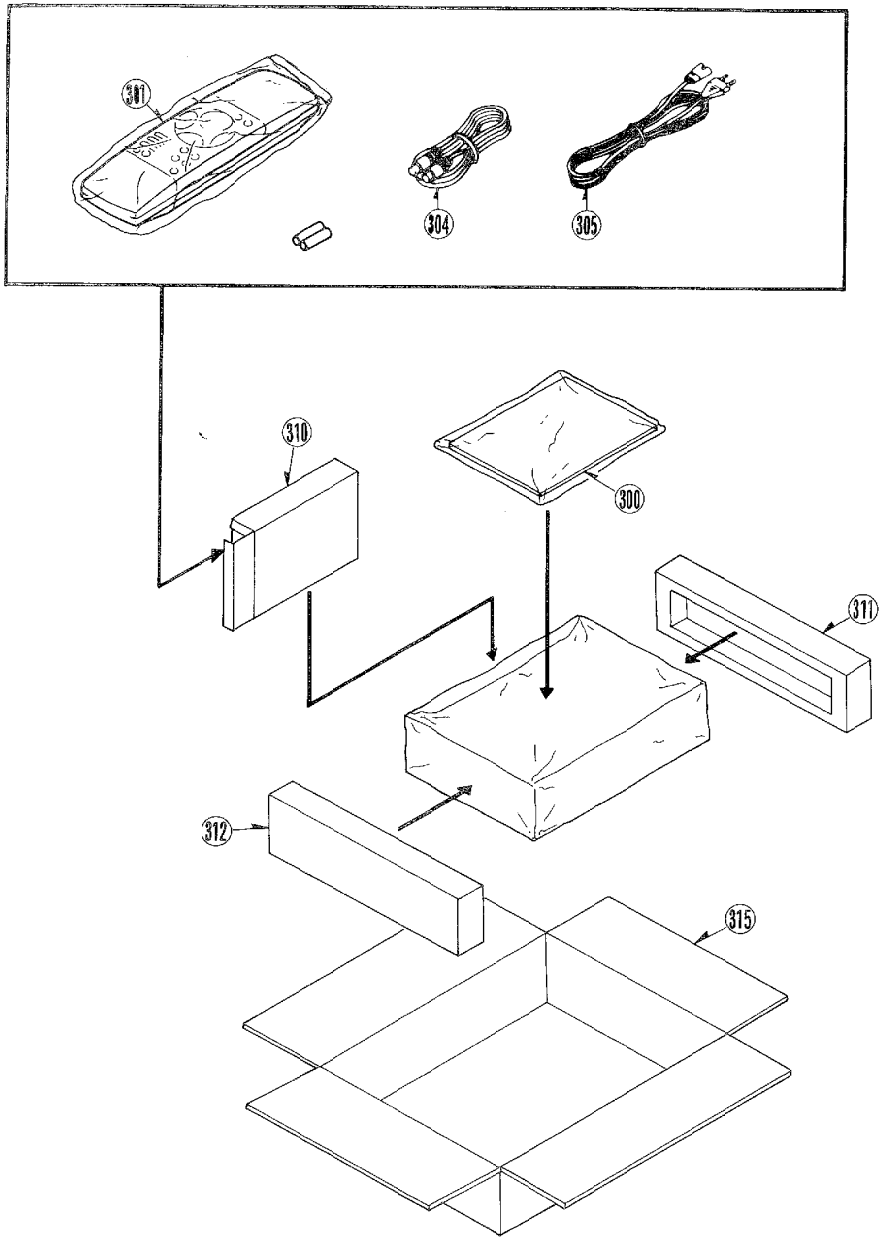
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VQX1105	TOP PANEL	1	[SUPPLIED FROM MBV]
201(3)		VXF5747	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
202(3)		VKF2293	BLINDER PANEL	1	[SUPPLIED FROM MBV]
203(3)		VMB2521	BLINDER SPRING	1	
204(3)		VKA0153	LEG	2	
208(3)		VKD0404	BOTTOM PLATE	1	
209(3)		VJF1134	PACK HOLDER	1	[SUPPLIED FROM MBV]
210(3)		VKA0122	FOOT	2	
211(3)		VMC1065	EARTH SPRING	1	
215(3)		VAJ0875	FLAT CARD CABLE	1	[SUPPLIED FROM MBV]
					P501-P3002
216(3)		VAJ32C9160BB	FLAT CARD CABLE	1	P6001-P7501
217(3)		VJH0790	ANTENNA JACK PLATE	1	[SUPPLIED FROM MBV]
B201(3)		XTW3+10TFZ	SCREW	4	
B202(3)		VHD0059	SCREW	3	
B203(3)		VHD0772	SCREW	4	
B204(3)		VHD0773	SCREW	3	
B205(3)		VHD0168	SCREW	3	
B206(3)		VHD0874	SCREW	1	
B207(3)		XTV26+8FR	SCREW	3	
B208(3)		XTV26+10F	SCREW	1	
B209(3)		XTV3+8FZ	SCREW	4	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

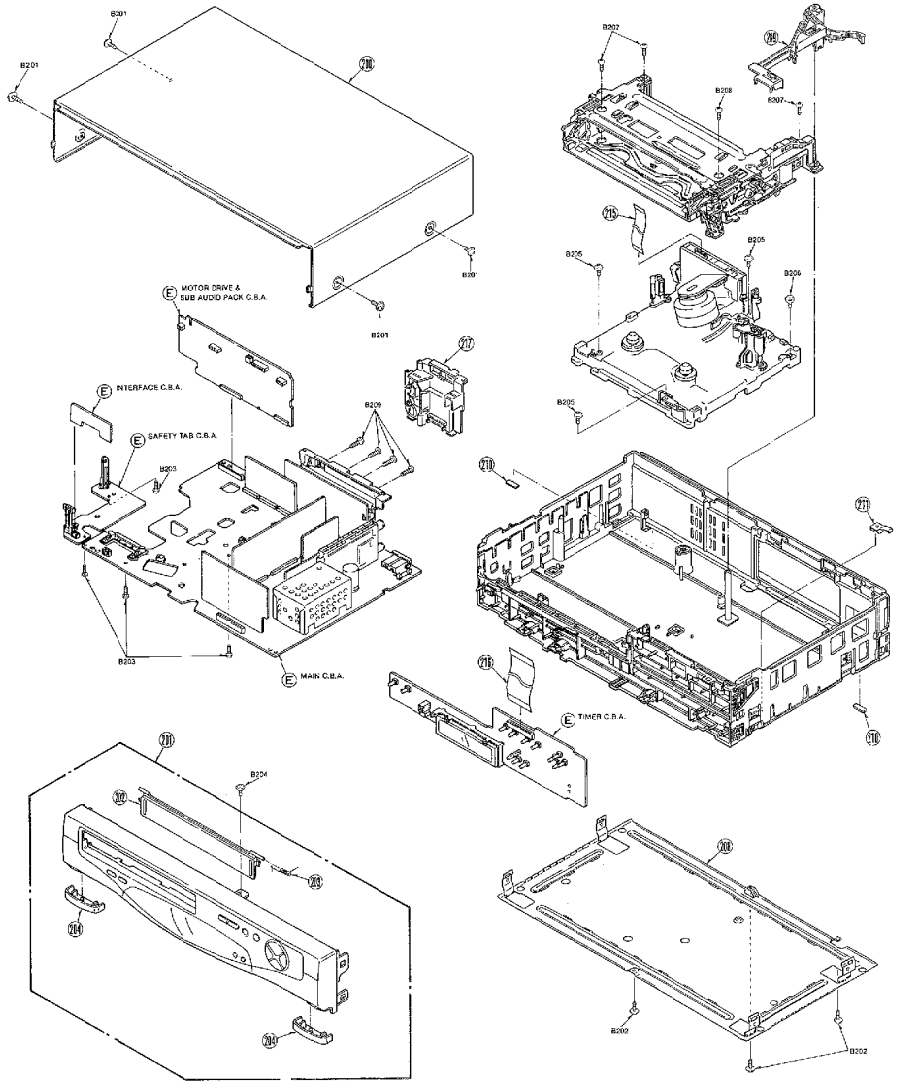
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT5899	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(ENGLISH/GERMAN/ITALIAN)		⟨!⟩
300(4)		VQT5900	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(FRENCH/DUTCH)		⟨!⟩
301(4)		VEQ1656	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
304(4)		VJA0710	DIN RF CABLE	1	
305(4)		VJA0664	AC CORD	1	⟨!⟩
310(4)		VPP0825	ACCESSORIES PAKING	1	
311(4)		VPM4034	CUSHION (R)	1	
312(4)		VPM4035	CUSHION (L)	1	
315(4)		VPC7801	PACKING	1	[SUPPLIED FROM MBV]
			SERVICE FIXTURES & TOOLS		
		VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
		VFK0335	RETAINING RING REMOVER (3mm/4mm)	1	
		VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
		VFK0326	HEX WRENCH SET	1	
		VFK0132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTONE GREASE	1	
		VFK0341	UPPER CYLINDER REMOVER	1	
		VFK0680	WHITE GREASE	1	
		VFK0851	CENTRE FIXING TOOL	1	
		VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
		VFK0939	13P EXTENSION CABLE	1	
		VFK0678	18P EXTENSION CABLE	1	
		VFK0917	11P EXTENSION CABLE	1	
		VFK0918	17P EXTENSION CABLE	1	

⑮ PACKING PARTS SECTION



SECTION 5

❸ CASING PARTS SECTION



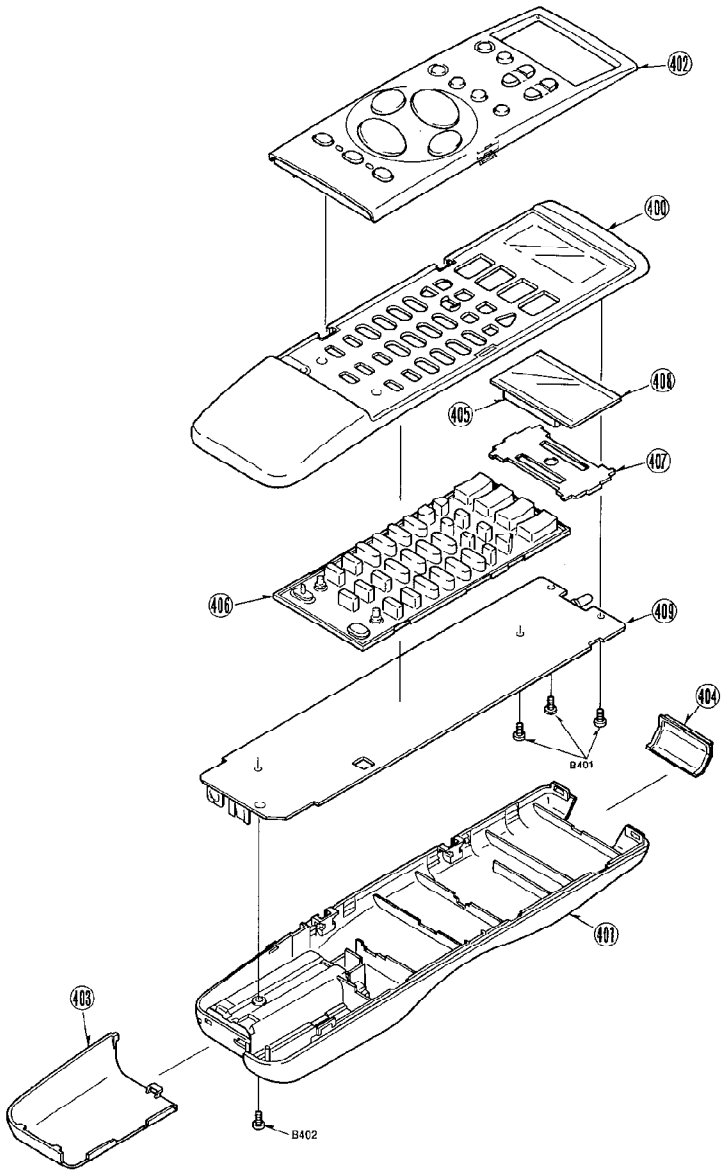
Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
200(3)		VGM1105	TOP PANEL	1	[SUPPLIED FROM MBV]
201(3)		VYP5947	FRONT PANEL UNIT	1	[SUPPLIED FROM MBV]
202(3)		VKF2703	BLINDER PANEL	1	[SUPPLIED FROM MBV]
203(3)		VMB2521	BLINDER SPRING	1	
204(3)		VKA0153	LEG	2	
208(3)		VKU0404	BOTTOM PLATE	1	
209(3)		VJF1134	PACK HOLDER	1	[SUPPLIED FROM MBV]
210(3)		VKA0122	FOOT	2	
211(3)		VMC1055	EARTH SPRING	1	
215(3)		VWJ0875	FLAT CARD CABLE	1	[SUPPLIED FROM MBV]
					P501-P3002
216(3)		VWJ3XC9160B8	FLAT CARD CABLE	1	P6001-P7501
217(3)		VJH0790	ANTENNA JACK PLATE	1	[SUPPLIED FROM MBV]
3201(3)		XTW3+10TF2	SCREW	4	
3202(3)		VHD0059	SCREW	3	
3203(3)		VHD0772	SCREW	4	
3204(3)		VHD0773	SCREW	3	
3205(3)		VHD0168	SCREW	3	
3206(3)		VHD0874	SCREW	1	
3207(3)		XTV26+8FR	SCREW	3	
3208(3)		XTV26+10F	SCREW	1	
3209(3)		XTV3+8FZ	SCREW	4	

Note:1.* Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE
Components identified with the mark ⟨!⟩ have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
300(4)		VQT5899	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(ENGLISE/GERMAN/ITALIAN)		⟨!⟩
300(4)		VQT5900	OPERATING INSTRUCTIONS	1	[SUPPLIED FROM MBV]
			(FRENCH/DUTCH		⟨!⟩
301(4)		VEQ1656	REMOTE CONTROLLER	1	[SUPPLIED FROM MBV]
304(4)		VJA0710	DIN RF CABLE	1	
305(4)		VJA0664	AC CORD	1	⟨!⟩
310(4)		VPK0825	ACCESSORIES PAKING	1	
311(4)		VPN4D34	CUSHION (R)	1	
312(4)		VPN4D35	CUSHION (L)	1	
315(4)		VPG7801	PACKING	1	[SUPPLIED FROM MBV]
			SERVICE FIXTURES & TOOLS		
		VEJ8125H3I	VHS ALIGNMENT TAPE(PAL)	1	
		VFKC335	RETAINING RING REMOVER	1	
			(3mm/4mm)		
		VFKC329	POST ADJUSTMENT SCREWDRIVER	1	
		VFKC326	HEX WRENCH SET	1	
		VFKC132	BACK TENSION METER	1	
		VFK27	HEAD CLEANING STICK	1	
		MOR265	MORLYTOOM GREASE	1	
		VFKC341	UPPER CYLINDER REMOVER	1	
		VFKC680	WHITE GREASE	1	
		VFKC851	CENIRE FIXING TOOL	1	
		VFKC330	FINE ADJUSTMENT GEAR DRIVER	1	
		VFKC939	13P EXTENSION CABLE	1	
		VFKC678	18P EXTENSION CABLE	1	
		VFKC917	11P EXTENSION CABLE	1	
		VFKC918	17P EXTENSION CABLE	1	

❺ REMOTE CONTROLLER UNIT



Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components, use only the same type.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
400(5)		VYK6368	TOP COVER UNIT	1	[SUPPLIED FROM MBV]
401(5)		VYK5446	BOTTOM COVER UNIT	1	
402(5)		VYK6367	DOOR PANEL UNIT	1	[SUPPLIED FROM MBV]
403(5)		VKF2115	BATTERY COVER	1	
404(5)		VKW1802	IR WINDOW	1	
405(5)		VSQ0830	CONDUCTIVE RUBBER	2	
406(5)		VSP0861	RUBBER CONTACT	1	[SUPPLIED FROM MBV]
407(5)		VSQ0829	LCD SPACER	1	
408(5)		VSL0319A	LCD	1	
409(5)		----------	REMOTE CONTROLLER C.B.A.	1	THE C.B.A. IS NOT
					SUPPLIED AS SPARE
					PART.
B401(5)		XTB2+6G	SCREW	3	
B402(5)		XTB2+8GFZ	SCREW	1	

5-2. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.Be sure to make your orders of replacement parts according to this list.
2.IMPORTANT SAFETY NOTICE : Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3.Unless otherwise specified.
All resistors are in OHMS , K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P-muF.
4.The P.C.Board units marked width'■'show below the main assembled parts.
5.The marking(RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEPO6976B	MAIN C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:5-8)		<!>(RTL)
					INCLUDING THE
					LUMINANCE &
					CHROMINANCE PACK
					C.B.A.(VEPO3B46C),
					Hi-Fi AUDIO PACK
					C.B.A.(VEPO4447PK),
					OSD PACK C.B.A.
					(VEPO6993A),
					DECORDER PACK C.B.A.
					(VEPO7784A)
					VIF C.B.A.
					(VEPO7801B).
		VEPO3B46C	LUMINANCE & CHROMINANCE	1	[SUPPLIED FROM MBV]
			PACK C.B.A.		(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEPO6976B).
		VEPO4447PK	Hi-Fi AUDIO PACK C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEPO6976B).
		VEPO6993A	OSD PACK C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEPO6976B).
		VEPO7784A	DECORDER PACK C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEPO6976B).
		VEPO7801B	TV DEMODULATOR PACK C.B.A.	1	[SUPPLIED FROM MBV]
					(RTL)
					INCLUDED IN MAIN
					C.B.A.(VEPO6976B).
		VEPO3B23B	INPUT/OUTPUT PACK C.B.A.	1	[SUPPLIED FROM MBV]
			(Page5-15)		(RTL)
		VEPO4469F	MOTOR-DRIVE C.B.A.	1	[SUPPLIED FROM MBV]
			(Page5-15)		(RTL)
		VEPO5204A	HEAD AMP C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:5-16)		(RTL)
		VEPO7817A	TIMER C.B.A.	1	[SUPPLIED FROM MBV]
			(Page:5-17)		(RTL)
		VEPOOU88A	MAIN INTERFACE C.B.A.	1	(RTL)
			(Page:5-18)		
		VEPOOU71A	S-TAB C.B.A.	1	(RTL)
			(Page:5-18)		
		VEXO129	CYLINDER DRIVE C.B.A.	1	(RTL)
			(Page:5-18)		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		----------	MOTOR C.B.A.	1	C.B.A. IS INCLUDED
			(Page:5-18)		IN LOADING MOTOR (1)
					UNIT(VEMO427).
		ENG47210C	TUNER	1	[SUPPLIED FROM MAV]
					<!>
F1101		XBA2C15TH15	FUSE	1	<!>
	■	VEPO6976B	MAIN C.B.A.		[SUPPLIED FROM MBV]
					<!>(RTL)
C301		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C302		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C303,04		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C305,06		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	2	
C308		ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C309		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C310		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C311		ECUX1H080DCV	C.CAPACITOR CH 50V 8P	1	
C312		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C313		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C314		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C315		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C316		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C317		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C318		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C319		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C320		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C321		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C322		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C323		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C325		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C326		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C327		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C328		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C329		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C330		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C331		ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
C332		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C333		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C334		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C336		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C337		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C338,39		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C340		ECUX1E223ZFV	C.CAPACITOR CH 25V 0.022U	1	
C341		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C342		ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C360		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C361		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C362		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C363		ECUX1H392KBV	C.CAPACITOR CH 50V 3900P	1	
C364		ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C365		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C381		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C382,83		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0701,02		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0704		ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C0706		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0707,08		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C0709		ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C0710		ECUM1H470JPV	C.CAPACITOR CH 50V 47P	1	
C0711		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0712		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0714		ECQB1H473JF	P.CAPACITOR 50V 0.047U	1	
C0715		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.1U	1	
C0716		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C0717		ECUM1H270JPV	C.CAPACITOR CH 50V 27P	1	
C0718		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C0719		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C0720		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C0723		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C0726		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0730		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C0732		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C801-04		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	4	
C806		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C808		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C813		ECUX1H181JCV	C.CAPACITOR CH 50V 180P	1	
C814		ECUX1H270JCV	C.CAPACITOR CH 50V 27P	1	
C815		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C839		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C840		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C841		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C842		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C843		ECUX1E223ZFV	C.CAPACITOR CH 25V 0.022U	1	
C844		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C845		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C846		ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C847		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C848		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C849		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C850		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C851		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C853		ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C854		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C856		ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C857		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C858		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C859		ECEA1HKAR33	E.CAPACITOR 50V 0.33	1	
C860		ECUM1H333KBN	C.CAPACITOR CH 50V 0.033U	1	
C861		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C862		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C868,69		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	2	
C893		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C1004		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1005		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C1006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1007		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1008		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1009		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1010		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1011		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1012		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C1013		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C1101		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1104		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1105		ECQE6104KF	P.CAPACITOR	1	
C1107		ECKMWS102MEH	C.CAPACITOR	1	<!>
C1110,11		ECQU2A104MN	P.CAPACITOR	2	<!>
C1112		ECEC2GG330	E.CAPACITOR 400V 33U	1	
C1113		ECKD2H103PU	C.CAPACITOR 500V 0.01U	1	
C1114		ECCD3A470KGE	C.CAPACITOR 1kV 47P	1	
C1115		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1116		ECEA1HGE470	E.CAPACITOR 50V 47U	1	
C1117		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C1118		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C1120		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C1121		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C1131		EEUFA1E681	E.CAPACITOR 25V 680	1	
C1132		ECEA1DFZ331	E.CAPACITOR 330U	1	
C1133		ECKD2H101KB5	C.CAPACITOR 500V 100P	1	
C1134		ECEA1AFZ681	E.CAPACITOR 10V 680U	1	
C1135		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1136		ECKD2H101KB5	C.CAPACITOR 500V 100P	1	
C1137		ECEA1JFE470	E.CAPACITOR 63V 47U	1	
C1138		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1139		ECKD2H101KB5	C.CAPACITOR 500V 100P	1	
C1140		ECEA1VFE820	E.CAPACITOR 35V 82U	1	
C1141		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1142		ECKD2H101KB5	C.CAPACITOR 500V 100P	1	
C1143		ECEA1AFZ331	E.CAPACITOR 10V 330U	1	
C1144,45		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C1147		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C1148		ECQV1H124JM	P.CAPACITOR 50V 0.12U	1	[SUPPLIED FROM MBV]
C1149		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C1150		ECA1CM101	E.CAPACITOR 16V 100U	1	
C1151		ECEA1CGE221	E.CAPACITOR 16V 220U	1	
C1153		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C2013		ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C2022		ECEA1EKS330	E.CAPACITOR 25V 33U	1	
C2023		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2024		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2025,26		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	2	
C2029,30		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C2031		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C2032		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C2033		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2034		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C2035		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C2037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2038		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2039		ECEA0JKA220	E.CAPACITOR 6.3V 220U	1	
C2040		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C2047		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2049-51		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	3	
C2052		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2053-55		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	3	
C3001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3002,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3004		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3005		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3006		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3007		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3008		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3009		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3010		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	1	
C3015		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3016		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3017,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3019		ECUM1H620JCN	E.CAPACITOR CH 50V 62P	1	
C3021		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3022		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3023		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3027		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3028		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3029		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3031		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3032		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3033		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3042,43		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3045		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4008		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4017		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4044		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4045		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504		ECEA1CU470	E.CAPACITOR 16V 47P	1	
C4505		ECA1VM470	E.CAPACITOR 35V 47P	1	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4524		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4528		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4537		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C2242FV	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4551		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4562		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1AU330	E.CAPACITOR 10V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594,95		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C4616		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA1CM22	E.CAPACITOR 10V 22U	1	
C4618		ECQB1H822JJ	P.CAPACITOR 50V 8200P	1	
C4621		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H822JJ	P.CAPACITOR 50V 8200P	1	
C4636		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C4630		ECQB1H822JJ	P.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	2	
C6001		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6003		ECUM1C2242FN	C.CAPACITOR CH 16V 0.22U	1	
C6006		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6007,08		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2	
C6010		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6011		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6013		ECUM1C105ZFN	C.CAPACITOR CH 50V 1U	1	
C6015,16		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	2	
C6029		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7302		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C7304		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C7308		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C7309		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C7310		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7311		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7312		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C7313		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314,15		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	2	
C7320,21		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C7323-25		ECUX1H153KBM	C.CAPACITOR CH 50V 0.015U	3	
C7326		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7328		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7330		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7332,33		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	
C7337		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7339		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7340		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341		ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7345		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7346		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347		ECUX1H070DCV	C.CAPACITOR CH 50V 7P	1	
C7349,50		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C7352		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7353		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C7601,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7603		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C7604		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7605		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7606		ECEA1CKA101	E.CAPACITOR 16V 100U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7607		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7609		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7610,11		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7612		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7614		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7615		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C7701		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C7702		ECUM1H080DCN	C.CAPACITOR CH 50V 80P	1	
C7703		ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C7704,05		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7706		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C7707-10		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C7712		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7714		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7720		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7722		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7727		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7729		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7731		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7732		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7734		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7738		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7740,41		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C7743		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7745		ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C7746,47		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7748		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C7749		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C7750		ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C7751		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7753		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7756		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7758		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7761		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7762		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7763,64		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7765		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7766,67		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7768		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7769		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7771		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7773		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C7775		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7777		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
D381		MA141K	DIODE	1	
D382		MA143	DIODE	1	
D383		MA141K	DIODE	1	
D1004		MA4051-L	DIODE	1	
D1005		1SS355	DIODE	1	
D1006		MA4051-L	DIODE	1	
D1007		1SS355	DIODE	1	
D1102		ERA15-08	DIODE	1	<!>
D1103		AP01C	DIODE	1	
D1104		MA178	DIODE	1	
D1105-07		ERA15-08	DIODE	3	<!>
D1108		RD100E	DIODE	1	[SUPPLIED FROM MBV]
D1109,10		ERA15-08	DIODE	2	
D1111		MA4120-M	DIODE	1	
D1121		RL22	DIODE	1	
D1122		21DQ04	DIODE	1	
D1123		ERA22-02	DIODE	1	
D1124		MA185	DIODE	1	
D1125		11EQS04	DIODE	1	
D1126		MA4047M	DIODE	1	
D1127		1SS355	DIODE	1	
D1129		MA4043-L	DIODE	1	[SUPPLIED FROM MBV]
D1130		1SS254	DIODE	1	
D1132		1SS355	DIODE	1	
D2003-05		1SS254	DIODE	3	
D2007		MA151WA	DIODE	1	
D3001		1SS254	DIODE	1	
D3010		MA151K	DIODE	1	
D3011		1SS355	DIODE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D4003		1SS355	DIODE	1	
D4005		1SS254	DIODE	1	
D4502-04		MA141K	DIODE	3	
D6001		LN59L.VT	LED	1	
D6002,03		1SS254	DIODE	2	
D6007		MA4075-L	DIODE	1	
D7304		MA29T-B	DIODE	1	
D7305		1SS254	DIODE	1	
D7307		MA151K	DIODE	1	
D7601		MA4300M	DIODE	1	
D7605		1SS254	DIODE	1	
D7701		MA151WA	DIODE	1	
D7704		1SS254	DIODE	1	
DL602		EFDBR124A53T	DELAY	1	
DL7701		VLD0275	DELAY	1	[SUPPLIED FROM MBV]
F1101		XBA2C16TH15	FUSE	1	<!>
IC301		MSM7403MS	IC	1	
IC302		TDA9715H/A	IC	1	[SUPPLIED FROM MBV]
IC0701		LA7576	IC	1	
IC1001		HA17431PA	IC	1	
IC1101		TDA4605-3	IC	1	[SUPPLIED FROM MBV]
					<!>
IC2001		XRA6887-V3	IC	1	
IC2004		LM358PS	IC	1	
IC4501		XLH7773AKS	IC	1	
IC4601		BA7755AF	IC	1	
IC6001		MN67434VRTA	IC	1	[SUPPLIED FROM MBV]
IC6002,03		ON1387	IC	2	
IC7301		TDA9845	IC	1	[SUPPLIED FROM MBV]
IC7302		TA8721SN	IC	1	
IC7701		M27C512MBAA	IC	1	[SUPPLIED FROM MBV]
IC7702		MC74HCT573AW	IC	1	[SUPPLIED FROM MBV]
IC7703		M52055FP	IC	1	
IC7704		ST24C08C	IC	1	[SUPPLIED FROM MBV]
IC7705		TDA8501	IC	1	[SUPPLIED FROM MBV]
IC7706		P80C528FBP	IC	1	[SUPPLIED FROM MBV]
IC7707		MC74HC164D	IC	1	[SUPPLIED FROM MBV]
IC7708		SAA5281PM3	IC	1	[SUPPLIED FROM MBV]
IC7709		MC74HC161AD	IC	1	[SUPPLIED FROM MBV]
K4		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K7		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K301		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K303		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0702		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0704		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K0705		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K801		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K802		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K805		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K806		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K807		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K851		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K2001		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4002		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4004		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4023		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7302		ERJ3GEY0R00	M.RESISTOR CH 1/10W 0	1	
K7316		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7601		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7604		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7701		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7705		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7709		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7714		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L301		ELESE330KA	COIL 33UH	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L302,03		ELESE390KA	COIL 39UH	2	
L304		ELESE101KA	COIL 100UH	1	
L306		ELESE121KA	COIL 120UH	1	
L307		ELESE101KA	COIL 100UH	1	
L308		VLQEL05S390J	COIL 39UH	1	
L0701,02		ELJNAR10MF	COIL 0.1H	2	
L0705		VLQ0163J5R6	COIL 5.6UH	1	
L0706		VLQEL05S120J	COIL 12UH	1	
L802		ELESE101KA	COIL 100UH	1	
L803		ELESE270KA	COIL 27UH	1	
L805		VLQEL05S150K	COIL 15UH	1	
L808		ELESE6R8JA	COIL 6.8UH	1	
L809-11		ELESE101KA	COIL 100UH	3	
L812		VLP0125	INDUCTOR	1	
L1107,08		ELF18D290A2	COIL	2	<!>
L1109		VLP0074	INDUCTOR	1	
L1110		VLP0085	INDUCTOR	1	
L1112		VLP0125	INDUCTOR	1	
L1121		VLQ0611KZ20	COIL 22UH	1	
L1122		ELELN220KA	COIL 22UH	1	
L1123,24		ELESE101KA	COIL 100UH	2	
L3001		VLQ0599J3R3	COIL 3.3UH	1	
L3002		VLQ0599J680	COIL 68UH	1	
L3003		VLQ0599J6R8	COIL 6.8UH	1	
L3004		VLQ0599J120	COIL 120UH	1	
L3006		VLQ0599J101	COIL 100UH	1	
L3007		VLQ0599J680	COIL 68UH	1	
L3008		VLQ0599JZ70	COIL 27UH	1	
L3009		VLQ0599J680	COIL 68UH	1	
L3011		VLP0074	INDUCTOR	1	
L4501,02		ELESE101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL	1	
L7601,02		VLQ0599J1R0	COIL 1UH	2	
L7603-05		VLQ0599J680	COIL 68UH	3	
L7607,08		VLQ0599J680	COIL 68UH	2	
L7701		ELESE100KA	COIL 10UH	1	
L7702		ELESE3R3KA	COIL 3.3UH	1	
L7704		ELESE100KA	COIL 10UH	1	
L7705,06		ELESE101KA	COIL 100UH	2	
L7708		ELESE270KA	COIL 27UH	1	
P1101		VJS3306	AC INLET	1	<!>
P2001		VJS3316A002	CONNECTOR (FEMALE) 2P	1	
P3002		VJS3537A020G	CONNECTOR (FEMALE) 20P	1	
P6001		VJS3537A032G	CONNECTOR (FEMALE) 32P	1	
P6004		VJS3317A004	CONNECTOR (FEMALE) 4P	1	
PK0701		VJR0816E010W	CONNECTOR 10P	1	
PK4001-03		VJR0757B018T	CONNECTOR 18P	3	
PK7301		VJR0777B007W	CONNECTOR 7P	1	
PK7302		VJR0777B005W	CONNECTOR 5P	1	
PP0701		VJP3589E004B	CONNECTOR (MALE) 4P	1	
PP2001		VJP3042A017W	CONNECTOR (MALE) 17P	1	
PP2002		VJP3042A011W	CONNECTOR (MALE) 11P	1	
PP3001		VJP3044G008W	CONNECTOR (MALE) 8P	1	
PP3002		VJP3044G013W	CONNECTOR (MALE) 13P	1	[SUPPLIED FROM MBV]
PP3003		VJP3044G006W	CONNECTOR (MALE) 6P	1	
PP3901		VJP3042A013W	CONNECTOR (MALE) 13P	1	
PP3902		VJP3042A018W	CONNECTOR (MALE) 18P	1	
PP6005		VJP3042A003W	CONNECTOR (MALE) 3P	1	
PP7701		VJP3043A010W	CONNECTOR (MALE) 10P	1	
PP7702		VJP3043A009W	CONNECTOR (MALE) 9P	1	
PS301		VJS3044F008W	CONNECTOR (FEMALE) 8P	1	[SUPPLIED FROM MBV]
PS302		VJS3044F013W	CONNECTOR (FEMALE) 13P	1	[SUPPLIED FROM MBV]
PS303		VJS3044F006W	CONNECTOR (FEMALE) 6P	1	
PS7701		VJS3043B009W	CONNECTOR (FEMALE) 9P	1	
PS7702		VJS3043B010W	CONNECTOR (FEMALE) 10P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q301		2SC3930	TRANSISTOR	1	
Q360		2SD1819A	TRANSISTOR	1	
Q361		2SB1218A	TRANSISTOR	1	
Q362		2SB1218A-R	TRANSISTOR	1	
Q0701		MSD601-S	TRANSISTOR	1	
Q0702		MSB709-R	TRANSISTOR	1	
Q804		2SC3930	TRANSISTOR	1	
Q1001		2SD601A	TRANSISTOR	1	
Q1002-04		2SD1996-S	TRANSISTOR	3	
Q1005		2SD602A	TRANSISTOR	1	
Q1006		MSD602	TRANSISTOR	1	
Q1101		STP3N60FI-M	TRANSISTOR	1	[SUPPLIED FROM MBV]
					<!>
Q1102		2SD601A	TRANSISTOR	1	
Q1104		2SB1321A	TRANSISTOR	1	
Q1105		2SD601A	TRANSISTOR	1	
Q1106		2SD2544OPQA	TRANSISTOR	1	
Q1107		MOC8104FR2V	TRANSISTOR	1	[SUPPLIED FROM MBV]
					<!>
Q1111		MOC8104FR2V	TRANSISTOR	1	[SUPPLIED FROM MBV]
					<!>
Q3001		XN4501	TRANSISTOR-RESISTOR	1	
Q3002		MSB710	TRANSISTOR	1	
Q3003		2SB709A	TRANSISTOR	1	
Q3004		MSD601	TRANSISTOR	1	
Q3005		MSC2295	TRANSISTOR	1	
Q3006		MSB709	TRANSISTOR	1	
Q3007		MSC2295	TRANSISTOR	1	
Q3010		MSB709-R	TRANSISTOR	1	
Q4002		2SD601A	TRANSISTOR	1	
Q4501		2SD1991A-R	TRANSISTOR	1	
Q4551		2SB1320A-R	TRANSISTOR	1	
Q4552		2SD1819A	TRANSISTOR	1	
Q6001		MSB709	TRANSISTOR	1	
Q6002		PN205L-NC.VT	PHOTO TRANSISTOR	1	
Q7301		MSD601-S	TRANSISTOR	1	
Q7601		2SB709A-R	TRANSISTOR	1	
Q7703,04		MSB709	TRANSISTOR	2	
Q7705		MSD601	TRANSISTOR	1	
Q7711		MSD601	TRANSISTOR	1	
Q7717		MSD601	TRANSISTOR	1	
Q7720		MSD601	TRANSISTOR	1	
Q7722		MSD601	TRANSISTOR	1	
Q7723		MSB709	TRANSISTOR	1	
QR360		UN511E	TRANSISTOR-RESISTOR	1	
QR361		UN5213	TRANSISTOR-RESISTOR	1	
QR806		UN5113	TRANSISTOR-RESISTOR	1	
QR807		UN5213	TRANSISTOR-RESISTOR	1	
QR1001,02		MUN2113	TRANSISTOR-RESISTOR	2	
QR1101		UN2114	TRANSISTOR-RESISTOR	1	
QR1102,03		MUN2213	TRANSISTOR-RESISTOR	2	
QR1104		MUN2212	TRANSISTOR-RESISTOR	1	
QR1105,06		MUN2213	TRANSISTOR-RESISTOR	2	
QR2002		UN2114	TRANSISTOR-RESISTOR	1	
QR2003		FMG8	TRANSISTOR-RESISTOR	1	
QR2006,07		IMD8	TRANSISTOR-RESISTOR	2	[SUPPLIED FROM MBV]
QR2008,09		MUN2213	TRANSISTOR-RESISTOR	2	
QR2014		MUN2213	TRANSISTOR-RESISTOR	1	
QR3001		MUN2111	TRANSISTOR-RESISTOR	1	
QR3002,03		DTC363EK	TRANSISTOR-RESISTOR	2	
QR3005		MUN2213	TRANSISTOR-RESISTOR	1	
QR3007		MUN2211	TRANSISTOR-RESISTOR	1	
QR3008		MUN2213	TRANSISTOR-RESISTOR	1	
QR4002,03		MUN2213	TRANSISTOR-RESISTOR	2	
QR6001		XN1211	TRANSISTOR-RESISTOR	1	
QR6003		MUN2211	TRANSISTOR-RESISTOR	1	
QR7304		MUN2213	TRANSISTOR-RESISTOR	1	
QR7601		MUN2213	TRANSISTOR-RESISTOR	1	
QR7707		UN2216	TRANSISTOR-RESISTOR	1	
QR7710		UN2216	TRANSISTOR-RESISTOR	1	
QR7716		UN2215	TRANSISTOR-RESISTOR	1	
QR7719		MUN2113	TRANSISTOR-RESISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R305,06		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R307		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R308,09		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R310		ERJ6GEYK125	M.RESISTOR CH 1/10W 1.2M	1	
R311		ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R319		ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R320		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R321		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R322		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R325		ERJ3GEYJ332	M.RESISTOR CH 1/16W 3.3K	1	
R328		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R329		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R331,32		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R333		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R334,35		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	2	
R337		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R338		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R360		ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R361		ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R362,63		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R364,65		ERJ3GEYJ561	M.RESISTOR CH 1/16W 560	2	
R367		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R369		ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R371		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R372		ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R373		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R383		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R392		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R393		ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	1	
R394		ERJ3GEYJ682	M.RESISTOR CH 1/16W 6.8K	1	
R0702		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R0704		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R0705		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R0706,07		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R0708		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R0709		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R0710		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R0713		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R0714		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R0715		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R0716		VREO040E151	M.RESISTOR CH 1/10W 150	1	
R0717		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R0718		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0719		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R0720		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0722		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R0728		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0729		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R0732		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R0783		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R801		ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R802		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R804		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R805		ERJ3GEYJ163	M.RESISTOR CH 1/16W 16K	1	
R809		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R811		ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R825		ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R827		ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R835		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R836		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R837		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R838		ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R839		ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R840		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R841		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R843		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R853		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R855		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R856		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R1001		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1002		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1003		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R1004		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R1005		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1006		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R1007		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R1008		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1009,10		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R1102,03		ERDS1TJ183	C.RESISTOR 1/2W 18K	2	[SUPPLIED FROM MBV]
R1104		ERJ6GMYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R1107		ERJ6GMYJ164	M.RESISTOR CH 1/10W 160K	1	
R1108		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R1109		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R1110		ERJ6GMYJ362	M.RESISTOR CH 1/10W 3.6K	1	
R1111		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R1112		ERJ8GEYJ304	M.RESISTOR CH 1/8W 300K	1	[SUPPLIED FROM MBV]
R1113		ERJ8GEYJ434	M.RESISTOR CH 1/8W 430K	1	[SUPPLIED FROM MBV]
R1114		ERX12SJR51	M.RESISTOR 1/2W 0.51	1	[SUPPLIED FROM MBV]
R1115		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1116		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
R1117		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1118		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1119		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1120		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1122		ERC1ZAGM334	S.RESISTOR 1/2W 330K	1	<!>
R1125		ERJ6GMYJ220	M.RESISTOR CH 1/10W 22	1	
R1126		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R1127		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R1128		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R1129		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R1130		ERDS1TJ472	C.RESISTOR 1/2W 4.7K	1	
R1134		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R1135		ERJ8GEYJ274	M.RESISTOR CH 1/8W 270K	1	
R1136		ERJ8GEYJ394	M.RESISTOR CH 1/8W 390K	1	[SUPPLIED FROM MBV]
R2001		ERJ6GMYG512	M.RESISTOR CH 1/10W 5.1K	1	
R2002		ERJ6GMYG913	M.RESISTOR CH 1/10W 91K	1	
R2003		ERDS2RJ7R5	C.RESISTOR 1/4W 7.5	1	
R2004		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R2005,06		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2007		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2011		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2013-15		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	3	
R2017,18		ERJ6GMYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R2019		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R2020		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2025		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R2027,28		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R2029,30		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R2035		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2037		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2038		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R2039		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R2040		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2041		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R2042,43		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R2044		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2045		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2046		ERJ6GMYG124	M.RESISTOR CH 1/10W 120K	1	
R2047		ERJ6GMYJ154	M.RESISTOR CH 1/10W 150K	1	
R2048		ERJ6GMYG114	M.RESISTOR CH 1/10W 110K	1	
R2049		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R2050		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R2051		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2052		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2053,54		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	2	
R2059		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R2060,61		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R2062		ERDS2RJ7R5	C.RESISTOR 1/4W 7.5	1	
R2063,64		ERDS2RJ6R8	C.RESISTOR 1/4W 6.8	2	
R2065		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R2066		ERJ6GMYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R3001,02		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R3003		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3004		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R3005		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3006		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R3007		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R3008,09		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	2	
R3011		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3012		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3013		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R3014		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3018		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3019,20		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R3021		ERJ6GMYJ391	M.RESISTOR CH 1/10W 390	1	
R3022		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3023,24		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	2	
R3025		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R3026		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3028		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R3030		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3033		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	1	
R3034		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R3035		ERJ6GMYJ821	M.RESISTOR CH 1/10W 820	1	
R3036		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R3037		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R3038,39		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R3041		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R3042		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3044		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R4006		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4008		ERJ6GMYJ393	M.RESISTOR CH 1/10W 39K	1	
R4014		ERJ6GMYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R4018		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	1	
R4043		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R4046		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4055		ERG2SJ821	M.RESISTOR 2W 820	1	
R4058		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4059,60		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	2	
R4061		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4062		ERG2SJ101	M.RESISTOR 2W 100	1	
R4063		ERDS2TJ221	C.RESISTOR 2W 220	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		ERJ3GEYG223	M.RESISTOR CH 1/16W 22K	1	
R4504,05		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4506,07		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R4508		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4509		VRE0071E622	M.RESISTOR CH 1/10W 6.2K	1	
R4511		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4512		VRE0071E153	M.RESISTOR CH 1/10W 15K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH 1/16W 10K	1	
R4518,19		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4522		ERJ3GEYJ225	M.RESISTOR CH 1/16W 2.2M	1	
R4527		VRE0071E333	M.RESISTOR CH 1/10W 33K	1	
R4528		VRE0071E153	M.RESISTOR CH 1/10W 15K	1	
R4529		ERJ3GEYG562	M.RESISTOR CH 1/16W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R4534		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4539		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4541		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4542		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	2	
R4553,54		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4558		ERJ3GEYG224	M.RESISTOR CH 1/16W 220K	1	
R4561		ERJ3GEYG273	M.RESISTOR CH 1/16W 27K	1	
R4562		VRE0034E123	M.RESISTOR CH 1/10W 12K	1	
R4563		ERJ3GEYG272	M.RESISTOR CH 1/16W 2.7K	1	
R4568,69		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4572		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4573		ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4578		VRE0071E473	M.RESISTOR CH 1/10W 47K	1	
R4581		ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
R4584		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4585,86		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4592		ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R4593		ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4596		ERJ3GEYC473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4597		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R4598,99		ERJ3GEYG104	M.RESISTOR CH 1/16W 100K	2	
R4603		ERJ3GEYG183	M.RESISTOR CH 1/16W 18K	1	
R4606		VRE0071E562	M.RESISTOR CH 1/10W 5.6K	1	
R4610		ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R4611		ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R4612		VRE0071E331	M.RESISTOR CH 1/10W 330	1	
R4613		ERJ3GEYG394	M.RESISTOR CH 1/16W 390K	1	
R4615		VRE0071E133	M.RESISTOR CH 1/10W 13K	1	
R4616		ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R4649		ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R4653		ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R4656		ERJ3GEYG243	M.RESISTOR CH 1/16W 24K	1	
R4657		ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R4666		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R4670		ERJ3GEYJ822	M.RESISTOR CH 1/16W 8.2K	1	
R4671		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6001		ERJ6GMYJ201	M.RESISTOR CH 1/10W 200	1	
R6002		ERJ6GMYG272	M.RESISTOR CH 1/10W 2.7K	1	
R6003		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6004		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6005-07		ERJ6GMYJ333	M.RESISTOR CH 1/10W 33K	3	
R6008		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R6009-11		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R6013		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6014,15		ERJ6GMYG223	M.RESISTOR CH 1/10W 22K	2	
R6016		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6017		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R6018		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R6020		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R6022		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6023		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6024-29		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	6	
R6030		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R6031		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6032,33		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R6034,35		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	2	
R6037		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6039,40		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R6041		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R6042		ERDS2TJ221	C.RESISTOR 2W 220	1	
R7302		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7303		ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R7304		ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R7305		ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7307		ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R7311		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7313		ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R7320		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7323		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7324,25		ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R7326		ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R7327		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7328		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7329		ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R7330		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R7336		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7337		ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	1	
R7345		ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R7352,53		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7354,55		ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
R7358,59		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R7362,63		ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R7601		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7602,03		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	2	
R7604		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7605-07		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	3	
R7608		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7609		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7610		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7611		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R7612		ERG1SJ601	M.RESISTOR 1W 600	1	
R7614		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	1	
R7615		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R7701		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7705		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7707		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7708		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7709		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7711		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7712,13		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R7723		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7725		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7727		ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R7729		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7730		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R7734		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7736		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7737,38		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	2	
R7741		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7742		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R7743		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R7745		ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R7748		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7750		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7751		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R7753		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7754		ERJ6GEYJ203	M.RESISTOR CH 1/10W 20K	1	
R7755		ERJ6GEYJ243	M.RESISTOR CH 1/10W 24K	1	
R7756		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R7757		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R7758		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7761		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R7765		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R7768		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7770		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R7772		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7774		EXBF9E103J	REISITOR-RESISTOR	1	
R7779		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R7781-83		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	3	
R7784,85		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R7787-89		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	3	
R7790		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R7791		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7794		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R7795		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7796		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R7797		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R7798		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R7799		ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
T0703		EQV5EC071A	TRANSFORMER	1	
T0704		EQV5EC072A	TRANSFORMER	1	
T1101		VLT0740	TRANSFORMER	1	[SUPPLIED FROM MBV]
					<!>
T7301		EQR7QG028P	TRANSFORMER	1	[SUPPLIED FROM MBV]
T7304		EIS5EC017A	TRANSFORMER	1	
T7305		EQS5EC033A	TRANSFORMER	1	
VR301		EVMEASA00B13	V.RESISTOR	1	
VR302		EVMEASA00B14	V.RESISTOR	1	
VR303,04		EVMEASA00B53	V.RESISTOR	2	
VR305,06		EVMEASA00B14	V.RESISTOR	2	
VR0701		EVNCBAA00B24	V.RESISTOR	1	
VR2001		EVNCYAA03B54	V.RESISTOR	1	
VR3001,02		EVNCYAA03B23	V.RESISTOR	2	
VR3012,13		EVNCYAA03B52	V.RESISTOR	2	
VR4501		EVMECSA00B53	V.RESISTOR	1	
VR4502		EVMEASA00BY4	V.RESISTOR	1	
VR4507		EVMEASA00BY4	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4550		EVMECSA00B14	V.RESISTOR	1	
VR7301,02		EVNCBAA00B53	V.RESISTOR	2	
X0701		VLF1178	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
X0703		EFCS5R5MW5	CRYSTAL OSCILLATOR	1	
X0704		VLF1035	CRYSTAL OSCILLATOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
X801		VSX0162	CRYSTAL OSCILLATOR	1	
X6001		VSX0609	CRYSTAL OSCILLATOR	1	
X7301		EFCT5R5MS5	CRYSTAL OSCILLATOR	1	
X7304		EFCT5R74MS5B	CRYSTAL OSCILLATOR	1	
X7305		VSX0648	CRYSTAL OSCILLATOR	1	[SUPPLIED FROM MBV]
X7701		VSX0583	CRYSTAL OSCILLATOR	1	
X7702		VSX0393	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		EY152BC	FUSE HOLDER	2	<!>
		VMD2029	REEL GUIDE	1	
		VMZ2212	CAPACITOR COVER	3	<!>
		VSC4141	SWITCH SHIELD COVER	1	
		ENG47210G	TUNER	1	[SUPPLIED FROM MBV]
					<!>
		VMX2402	WASHER	1	[SUPPLIED FROM MBV]
		VMP4471	TV DEMODULATOR ANGLE	1	FOR TV DEMODU. C.B.A.
		VMD1926	SENSOR LED HOLDER	1	FOR D6001
		VMD1927	PHOTO TRANSISTOR HOLDER	1	FOR Q6002
	■	VEP03B23B	INPUT/OUTPUT PACK C.B.A.		[SUPPLIED FROM MBV]
					(RTL)
C3901		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3903		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3903		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3904		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3905,06		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3909		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3910		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3913		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3914		ECEA0JKA331	E.CAPACITOR 6.3V 330U	1	
C3915		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4903-12		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	10	
D3901		MA4056M	DIODE	1	
D3902		1SS254	DIODE	1	
D3903		MA151K	DIODE	1	
D3907		MA4056M	DIODE	1	
IC3901		MC14053BF	IC	1	
IC3902		MC14052BF	IC	1	
IC3903		MC14051BF	IC	1	
IC3904		EU12101-02	IC	1	[SUPPLIED FROM MBV]
IC4901		MC14052BF	IC	1	
IC4902,03		NJM4558M	C	2	
IC4904		MC14052BF	IC	1	
JK3901,02		VJS1470	21PIN SKIRT JACK	2	
JK3903		VEJ1486	I/O JACK PLATE	1	[SUPPLIED FROM MBV]
K3901		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
K4901		ERJ6GMZOR00	M.RESISTOR CH 1/10W 0	1	
L3901		VLQ018BJ101	COIL 100UH	1	
L3902		VLQ0599J101	COIL 100UH	1	
L4905,06		VLQ0599J471	COIL 470UH	2	
PS3901		VJS3042B013W	CONNECTOR (FEMALE) 13P	1	
PS3902		VJS3042B018W	CONNECTOR (FEMALE) 18P	1	
Q3901		MSD601	TRANSISTOR	1	
Q3902		MSB709	TRANSISTOR	1	
Q3903		MSD601	TRANSISTOR	1	
Q3904		MSB709	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR3901		MUN2212	TRANSISTOR-RESISTOR	1	
QR3902		UN2216	TRANSISTOR-RESISTOR	1	
QR3903		MUN2111	TRANSISTOR-RESISTOR	1	
QR3904		UN4113	TRANSISTOR-RESISTOR	1	
R3901.02		ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	2	
R3903		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3904		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3905		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3906		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3907		ERJ6GEYG680	M.RESISTOR CH 1/10W 68	1	
R3908		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R3909		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3910		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R3911		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R3912		ERJ6GEYG680	M.RESISTOR CH 1/10W 68	1	
R3913		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R3916		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R3917		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R3918		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R3921		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R3922		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R3923,24		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R3925,26		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	2	
R3927		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R3928		ERD32TJ223	C.RESISTOR 1/4W 22K	1	
R4901		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4902		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R4903,04		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R4905		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4906		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4907		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R4908		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R4909		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4910		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4911		ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R4912		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R4913,14		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R4920		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R4921		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4924		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R4926		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R4928		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R4931		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4933		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4935		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R4937,38		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
SW3901		ESD172311	SWITCH	1	
			MISCELLANOUS		
		XTV3+8F2	SCREW	4	FOR 21PIN SKIRT JACK
	■	VEP04469F	MOTOR DRIVE C.B.A.		[SUPPLIED FROM MBV]
					(RTL)
C2501,02		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	2	
C2503		ECA1EM470	E.CAPACITOR 25V 47U	1	
C2504		ECEA1HKNR22	E.CAPACITOR 50V 0.22	1	
C2505		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2506		ECA1EM470	E.CAPACITOR 25V 47U	1	
C2507,08		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	2	
C2509		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2510		ECAOJM221	E.CAPACITOR 6.3V 220U	1	
C2511		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	1	
C2512		ECOV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2513		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2514-16		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C2517		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2518		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C2519		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2520		ECUX1C474ZFN	C.CAPACITOR CH 16V 0.47U	1	
C2521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2523		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	1	
C2525		ECFA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2540		ECEA1HKAR47	E.CAPACITOR 50V 0.47	1	
C2541		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C4712		ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C4713		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C4714		ECQP1332JZ	P.CAPACITOR 100V 3300P	1	
C4715		ECCD2H101J	C.CAPACITOR 500V 100P	1	
C4716		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C4732		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C4744		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
D2501,02		MA185	DIODE	2	
D2504,05		MA700	DIODE	2	
D2506		1SS355	DIODE	1	
D4702		MA151K	DIODE	1	
IC2501		BA6871S	IC	1	
K4708		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4710		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L2502		VLP0074	INDUCTOR	1	
L4702		ELESE471KA	COIL	1	
L4705,06		VLP0150	INDUCTOR	2	
P2003		VJP3502	CONNECTOR (MALE)	1	
P2501		VJS3537A015G	CONNECTOR (FEMALE) 15P	1	
P2502		VJP1232T	CONNECTOR (MALE) 5P	1	
P4002		VJS2329	CONNECTOR (FEMALE)	1	
P4003		VJP1230T	CONNECTOR (MALE) 3P	1	
PS2501		VJS3042B017W	CONNECTOR (FEMALE) 17P	1	
PS4701		VJS3042B011W	CONNECTOR (FEMALE) 11P	1	
Q4701		2SD602A-R	TRANSISTOR	1	
Q4703		2SB1320A-R	TRANSISTOR	1	
QR4703		MUN2214	TRANSISTOR-RESISTOR	1	
R2501		ERJ6GMYG821	M.RESISTOR CH 1/10W 820	1	
R2502		ERJ6GMYG681	M.RESISTOR CH 1/10W 680	1	
R2503,04		ERDS2TJ560	C.RESISTOR 1/4W 56	2	
R2505		ERDS1TJ561	C.RESISTOR 1/2W 560	1	
R2506		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R2507		ERJ6GMYG432	M.RESISTOR CH 1/10W 4.3K	1	
R2508		ERJ6GMYG473	M.RESISTOR CH 1/10W 47K	1	
R2509		ERJ6GMYJ684	M.RESISTOR CH 1/10W 680K	1	
R2510		ERJ6GMYG103	M.RESISTOR CH 1/10W 10K	1	
R2511		ERJ6GMYG133	M.RESISTOR CH 1/10W 13K	1	
R2512		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2513,14		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R2515		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2516		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2517		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R2518		ERJ6GMYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R2519		ERDS2TJ560	C.RESISTOR 1/4W 56	1	
R2520		ERX1ZSJR47	C.RESISTOR 1/2W 0.47	1	
R2521,22		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R2529		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2530		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R2531		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R2532		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R2533		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R2534		ERJ6GMYJ683	M.RESISTOR CH 1/10W 68K	1	
R4710		ERJ6GMYJ432	M.RESISTOR CH 1/10W 4.3K	1	
R4715		ERJ6GMYJ153	M.RESISTOR CH 1/10W 15K	1	
R4723		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R4735		ERJ6GMYJ100	M.RESISTOR CH 1/10W 10	1	
T4701		EIQ7QF014Q	TRANSFORMER	1	
VR2006		EVNDCAA03B15	V.RESISTOR	1	
VR2011		EVNDCAA03B15	V.RESISTOR	1	
VR4001		EVNDCAA03B15	V.RESISTOR	1	
			MISCELLANEOUS		
		VEE9091	WIRE CABLE	1	(P2003-POWER TR.)
		VEE9112	WIRE CABLE	1	(P4003-ERASE HEAD)
		VEE9144	WIRE CABLE	1	[SUPPLIED FROM MBV]
					(P2502-CYLINDER)
		VWJ0868	FLAT CARD CABLE	1	(P2501-CAPSTAN)
	■	VEP05204A	HEAD AMP C.B.A.		[SUPPLIED FROM MBV]
					(RTL)
C501		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C502,03		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C504		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C505		ECUM1C1052FN	C.CAPACITOR CH 50V 1U	1	
C506		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C507		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	1	
C508,09		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C510,11		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C512,13		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	2	
C514,15		ECUM1H1042FN	C.CAPACITOR CH 50V 0.1U	2	
C516-18		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	3	
C519		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C521		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C523		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C524		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C526		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C527		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C528		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C529		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C530		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C532		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C541		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C542		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C551		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C552		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C553		ECFA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C554-57		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	4	
C558		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C559		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
C560		ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C561		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C562		ECUM1H1032FN	C.CAPACITOR CH 50V 0.01U	1	
D501		1SS254	DIODE	1	
D502,03		MA151WA	DIODE	2	
D551		MA151WA	DIODE	1	
D552		1SS254	DIODE	1	
IC501		AN3360SB	IC	1	
K501		VLP0145	INDUCTOR	1	
K502		VLP0145	INDUCTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K503		VLP0145	INDUCTOR	1	
K504		VLP0145	INDUCTOR	1	
L501,02		VLQ0599J680	COIL 68UH	2	
L505		VLQ0599J121	COIL 120UH	1	
L506		VLQ0599J151	COIL 150UH	1	
L507		VLQ0599J680	COIL 68UH	1	
L551,52		VLQ0599J680	COIL 68UH	2	
P501		VJS3537B020G	CONNECTOR (FEMALE) 20P	1	
P502		VJS2603	CONNECTOR (FEMALE)	1	
Q503		MSD601	TRANSISTOR	1	
QR501		MUN2213	TRANSISTOR-RESISTOR	1	
QR502		UN2221	TRANSISTOR-RESISTOR	1	
QR551		MUN2213	TRANSISTOR-RESISTOR	1	
R501		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R503		VRE0034E102	M.RESISTOR CH 1/10W 1K	1	
R504		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R505		ERJ6GMYJ273	M.RESISTOR CH 1/10W 27K	1	
R506		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
R507		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R508-11		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	4	
R512,13		ERJ6GMYJ561	M.RESISTOR CH 1/10W 560	2	
R514		ERJ6GMYG242	M.RESISTOR CH 1/10W 2.4K	1	
R515		ERJ6GMYJ271	M.RESISTOR CH 1/10W 270	1	
R516		ERJ6GMYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R517		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R518,19		ERJ6GMYJ681	M.RESISTOR CH 1/10W 680	2	
R526,27		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	2	
R528		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R529		ERJ6GMYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R530		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R532		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R533		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R549		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R551		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R552		VRE0034E160	M.RESISTOR CH 1/10W 16K	1	
R553,54		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	2	
R555		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R556		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
			MISCELLANEOUS		
		VSC3478	SHIELD COVER (MAIN)	1	
		VSC3714	SHIELD COVER (TOP)	1	
		VSC3715	SHIELD COVER (BOTTOM)	1	
	■	VEP07817A	TIMER C.B.A.		[SUPPLIED FROM MBV]
					(RTL)
C7501		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7502		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504,05		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7506		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C7507		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C7508		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7509		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7510		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7511		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C7512		ECRHA010A54R	V.CAPACITOR	1	
C7513		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C7514		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7515		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7516		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C7517		VCE0073	E.CAPACITOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7518-21		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C7523-25		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C7526		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
D7501,02		MA73	DIODE	2	
D7503,04		1SS254	DIODE	2	
D7505		MA73	DIODE	1	
D7506-08		1SS254	DIODE	3	
D7509		LN81RCPH	LED	1	
D7512,13		1SS254	DIODE	2	
D7515		1SS254	DIODE	1	
D7518		1SS254	DIODE	1	
D7528		1SS254	DIODE	1	
D7531		1SS254	DIODE	1	
D7532		MA4220	DIODE	1	
D7533		1SS254	DIODE	1	
D7540		1SS254	DIODE	1	
D7541		HLMK-D315	DIODE	1	[SUPPLIED FROM MBV]
D7542		1SS254	DIODE	1	
D7546,47		1SS254	DIODE	2	
DP7501		VSL0325	DISPLAY TUBE	1	
IC7501		M37507V4BW	IC	1	[SUPPLIED FROM MBV]
IC7503		RPM675CBRX1O	IR RECEIVER UNIT	1	
IC7504		PST7023	IC	1	
IC7505		S80743AL-2	IC	1	
K7502		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
K7503		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
K7509		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
K7514		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
P7501		VJS3537B032G	CONNECTOR (FEMALE) 32P	1	
Q7501		2SD1991A	TRANSISTOR	1	
QR7501		MUN2112	TRANSISTOR-RESISTOR	1	
QR7503		MUN2211	TRANSISTOR-RESISTOR	1	
QR7504		MUN2111	TRANSISTOR-RESISTOR	1	
R7501-03		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	3	
R7505		ERJ6GMYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R7506-10		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	5	
R7512		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7514		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7515		ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R7516		ERJ6GMYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R7518		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7519		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R7520		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7521		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R7534,35		ERJ6GMYJ132	M.RESISTOR CH 1/10W 1.3K	2	
R7536		ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	1	
R7537		ERJ6GMYJ151	M.RESISTOR CH 1/10W 150	1	
R7539		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R7540		ERJ6GMYJ331	M.RESISTOR CH 1/10W 330	1	
R7542		ERJ6GMYJ224	M.RESISTOR CH 1/10W 220K	1	
R7544,45		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7546		ERJ6GMYJ181	M.RESISTOR CH 1/10W 180	1	
R7549		ERJ6GM2OR00	M.RESISTOR CH 1/10W 0	1	
R7551,52		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	2	
R7553		ERJ6GEYJ180	M.RESISTOR CH 1/10W 18	1	
R7554		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7556		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	
R7557		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R7558		ERJ6GMYJ221	M.RESISTOR CH 1/10W 220	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW7502-04		EVQ11409K	SWITCH	3	
SW7506-10		EVQ11409K	SWITCH	5	
SW7512-15		EVQ11409K	SWITCH	4	
X7501		VSX0608	CRYSTAL OSCILLATOR	1	
X7502		VSX0094	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJF1122	FIP HOLDER	1	
		VMD1047	LED SPACER	2	
		VMD2247	IR RECEIVER HOLDER	1	
	■	VEP00U88A	MAIN INTERFACE C.B.A.		(RTL)
PS1501		VJS3042B003W	CONNECTOR (FEMALE) 3P	1	
PS6005		VJS3042B003W	CONNECTOR (FEMALE) 3P	1	
	■	VEP00U71A	S-TAB C.B.A.		(RTL)
PP1501		VJP3042A003W	CONNECTOR (MALE) 3P	1	
Q1501		PN205L-NC.VT	TRANSISTOR	1	
SW1501		VES0695	SAFETY TAB SWITCH	1	
			MISCELLANEOUS		
		VMD1927	PHOTO TR. HOLDER	1	FOR Q1501
	■	VEX0129	CYLINDER DRIVE C.B.A.		(RTL)
C2901-03		ECEA1VSN2R2	E.CAPACITOR 35V 2.2U	3	
C2904-06		ECUM1E104KBM	C.CAPACITOR CH 25V 0.1U	3	
C2907		ECUM1E683KBM	C.CAPACITOR CH 25V 0.068U	1	
C2908		ECUM1E473KBM	C.CAPACITOR CH 25V 0.047U	1	
C2910		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
IC2901		AN3814K	IC	1	
P2901		VJP2603W	CONNECTOR (MALE)	1	
P2902		VJP1232T	CONNECTOR (MALE) 5P	1	
R2901		ERX12SJR68	M.RESISTOR CH 1/2W 0.68	1	
			MISCELLANEOUS		
		VMA9138	MAIN HOLDER	1	
	■	----------	MOTOR C.B.A.		
			MISCELLANEOUS		
		VJP3316B002	CONNECTOR (FEMALE) 2P	1	

INTERNAL REFERENCE CODES

NOTE: This chart is only for internal reference.
Do not order any parts according to these codes.

P. C. B.	FILM CODE
MAIN SYUGO	HOA000-0284B
LUMINANNCE & CHROMINANCE	HOA000-03B46
OSD	HOA000-06993
HIFI AUDIO	HOA000-04447
INPUT/OUTPUT	HOA000-03B23
TIMER SYUGO	HOA000-0285B
TV DEMODULATOR	HOA000-07801
DECODER	HOA000-07784
MOTOR DRIVE	HOA001-04469
HEAD AMP	HOA000-05204
CYLINDER DRIVE	HOA001-00V23
LOADING MOTOR	HOA000-00S75

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